time zones and

Windows Ups Appeal of Macs

XP support makes Apple's hardware a more viable choice, say IT managers

Apple Computer Inc.'s develcoment of software that lets Intel-based Macintosh systems run Windows XP natively met | such as Microsoft Corp.'s with the approval of several Mac-friendly

IT managers, who said last week that Apple's embrace of Microsoft's operating system should make it easier to deploy

the company's hardware. Until now, Mac users who needed to run some Windows applications had to do so in emulation mode using tools

Virtual PC, which exacts a serious performance toll. But Apple's Boot Camp software, which was released for public beta testing with lit-

New Database Rejects Eligible Calif. Voters from casting ballots in a lune 6

Troubled system built to comply with federal law

BY MARC L. SOROIN California's new voter registration database - whose creation the federal government once called a model for other states - may prevent thousan's of eligible voters

statewide election, officials fear. Since the database was installed last December, the voter registration process has been invalidating numer ous registrations, mostly as a result of minor data-entry For example, 14,629 out of

34,064 voter registration forms Voters, page 60

Idealista allianthe attailed ald als #8234945/CB/78 CH299615

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PERIODICALS

trickier politics. Welcome to the world of the

The job has changed a lot

in the past few years; greater immersion in the business. tighter deadlines, more



Census Counts Itself As Big Handheld User

Feds will roll out 500,000 devices at

a cost of \$600M BY MATT HAMBLEN Federal census takers will use wireless handheld com

puters instead of pens and paper when they next hit the streets in 2010, provided that a \$600 million project designed to automate the collection of

census data goes as planned. The U.S. Census Bureau last week officially signed a deal to buy about \$00,000 handhelds and related technology from a team of vendors led by

Harris Corp. The fiveyear contract awarded to Harris and its portners covers all aspects of the Field Data Collection Automation Project, according to

Census Bureau officials.

Despite the project's steep cost, the use of handhelds should save the government millions of dollars" by reducing the time it takes census workers to gather data, improving the information's accuracy and minimizing the

need to process paper census forms, said Edwin Wagner Jr., the Census Bureau's project manager.

The pocket-size handbelds will run Mismood Corn't Win dows Mobile 5.0 operating system and be made Census, page 16







THE WORLD ACCORDING TO ANTHONY

I've decided to change the rules. From now on, threats will be afraid of me. Dynamic Networking from AfaT analyzes real-time traffic over the AfaT network to predict Security threats before they become security breaches. With frewalls and influsion protection, the AfaT network provides Anthony with a front line of defense and the confliction to take this provincy wherever he predict with report of and the confliction to take this provincy wherever he predict with respectively.

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04.10.06



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Community Colleges Get Real

in the Management section: Some community colleges are overhauling their IT programs with help from real-world advisers, like Boeing's Don Alishio, who's part of a group of business people in the Auburn, Wash, area that helped Green Rever Community College revame its curriculum Page 52

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Multisourcing deals require a disciplined approach to manage ing vendors, according to attendces at a Gartner conference

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12 Microsoft plans to support on all services of Windows that users are creating Access databases and realizes that they 14 Global Dispatches: U.S. trade officials criticize China's techare yet another way for sensitive pology policies; and South Korean trade regulators check in on Qual-

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IBM adds several SOA tools 15 and services that users say can ease the task of building service-oriented architectures.

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rhanes-Oxley. Companies

are finding unexpected value in their Sarbanes-Oxley compliance efforts. Harvard Business Review authors Lee Dittmar (left) and Stephen Wagner explain how.

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24 Michael Gartenberg thinks Intel Macs that can run Windows should get IT's attention.

25 Michael H. Huges explains how casy it can be to remove the complexity from an IT project. Curt A. Monash says a good

40 GUI is the most important feature a product can have 56 Bart Perkins offers advice un how to avoid eight notholes that can make your route to effective chareeback burney.

62 Frankly Speaking: Frank Hayes doesn't think Apple is making a play for the corporate market with Boot Camp. But with Mars. able to run Windows, IT will no longer be able to say no to those status-seeking evecs who see Apple's sleek machines as enviable tors

DEPARTMENTS/RESOURCES At Deadine Briefs.

FAO: Macs Running Windows - What You Should Know

OPERATION SYSTEMS: Find out which hardware will run XP using Apple's new Book Camp software, learn what it means for Microsoft, and get the scoop on caveats you should be aware of before you start installing O OvickLink a8470

XP on a Mac? Readers Weigh In ormous: After Apple announced that

Windows can now run on Intel-based Mass readers were quick to send in their thoughts O Quicklink aff480

When 'Supernova Burnout' Grinds at Your Psyche CAMEERS: If job stress is rearing its ugly head. these four steps from Carperlournal com can belo. O Oricki jok a8510

Certification: Is It Worth It? **METWORKING:** Those initials after your name can help you land a job and get more pay, but solid experience in handling real-world

problems is still key. O QuickLink a8460 Test Your Disaster Recovery Plan METWORKING: Columnist Sandra Gittlen per-

ommends eight steps to ensure that your network is ready to handle any emergency.

O Ouicklink a6490

Are Your Data Exports From Europe Legal?

openion: Privacy officer Jay Cline warms that moving employee or customer data out of Europe is illegal unless you follow the European Union's privacy directive. He identifies four ways to do it but cautions that each one is imperfect QuickLink #8500

ONLINE DEPARTMENTS Breaking News

Newslatter Subscriptions e

Patch on Tuesday dicrosoft Corp. is set to rel

scluding a fix for an Internet Explorer bug that hackers have been exploiting during the past vo weeks. Microsoft will also offer fraes for three bugs in Win dows and another for an une d problem in the Micros Thee bundle. Microsoft offers few details on other natches, excool to say that some will require that the computers he restarted

SAP Slowly Enters

iong as it doesn't "can riorprise software be CEO Henning Kagermann told ters last week, Kage said SAP will work to keep up with the on-demand bus als Oracle Corp. and Microsoft Corp. but added that "we'll never As our core business. (Onand] will be an additional

Turbolinux Buys Maker of PHP Tools

on Source Japan Ltd., Zend's ent company, with a view to ning distribution of Zend's is for building Web-based

Hours-Long Outage Affects MSN Search oft Corp.'s MSM search a. the third most possiler in the U.S., suffered an hours-long or late last week as conc ed an error message ined of Web page results. The

nan said. The comp ne to find the car of the problem late last week

AT DEADLINE Multisourcing Adds to IT Management Load

Disciplined approach is needed to control multiple outsourcing vendors

ONE OF the IT man agers in the audience at a Gartner Inc. outsourcing conference here last week seemed to bot an eye when they were warned that a lack of discipline in managing multiscurring relationships could result in "large-scale

business disputtion Gartner analyst Linds Cohen raised the specter of business disruprious after telling attendage that they need to develop disciplined anproaches to oursourcing, nor ad hoc ones — especially as their companies adopt multisourcing strategies and sign contracts with more and more IT services providers.

"You are beading for a much

Outsourcing Leaders Fuse

IT and Business Skills

more complex operating envicomment where you have more services delivered externally." Coben said.

Strategic Responsibilities The key to successfully managing multiple outsourcing vendors, according to 1T executives from Du Poet Co. and ARN Amro Book MV who et.

tended the Gartner conference is retaining strategic planning and architecture design responsibilities in house By doing so, "you're responsible for your own destiny in defining how the systems work together," said Brace Jacobs. CIO at ARN Americ North American operations.

Amsterdam-based ARN Amro is outsourcing its IT infrastructure management, application development and

For example, the banking

commany finalized applica-

tion development deals last

September with five vendoes

including Accenture Ltd. IBM

and India-based firms Infosys

Technologies Ltd., Patni Com-

The five yendors compete

for individual application ser-

vices contracts but must work

as a team in a "peer-to-peer re-

feet. ABN Amro has created an

internal market" for contract-

ing application development

To manage the different

kept overall IT management

and assembled IT teams with

people who have strong busi-

ness knowledge, Jacobs said.

The bank has also estab-

lished subject-matter experts

- staffers who are highly ex-

service providers, ABN Amro

and strategic planning internal

work globally, he explained

lationship " lacobs said In ef-

puncy Systems Ltd. and Tara

Consultancy Services Ltd.

perienced, for instance in how

covment or trading systems function. They work with ABN Amro's IT architects and relationship management staffers to help ensure that the bank's systems meet business needs, according to Jacobs In addition, ABN Amro has created a requirements analyst job function with resources hility for turning business requirements into technical specifications for the outsourcing vendors. And just to be safe, it has retained some in-house coding capabilities as insurance," Incohe said Du Pont signed an outsource ne contract with Computer Sciences Corp. in 1997 and

now also has deals with Accenture and other vendors. Maryann Holloway, director of alliance management and operations at the Wilmington. Del.-hased chemical company, said it's important "that both sides understand what their roles are and what they are going to deliver" as part of an ourcine relationship

To help ensure that the outsourcing vendors it works with meet its services delivery requirements. Du Pont has retained all of its top IT management positions internally. Holloway said. The company tries to fill those jobs with experienced managers who are in the middle of their careers. We really look for IT leadership skills," she said.

free security patches tomorro

osted App Business SAP A6 will gradually expand

Turbolinux Inc. has agreed to buy a 90% stake in Zend Jus Ltd., a maker of tools based on the PHP scripting language Turbolinux bought the stake fr

ge hegan around 8:30 a.m. fic Daylight Time last Thurs day and ended around noon, s

war. But, he said, "I didn't want to

the service representation of that's where they get you." lerry Bartlett, CIO at TD Ameritrade Holding Corn

in Omaha said he advocator

that his comeany be vendor-

appostic but acknowledged

that it's almost exclusively an

EMC shop. "That's problem-

IT Execs Criticize Storage Pricing Models

They contend that software services and equipment costs are inflated

BY LUCAS MEARIAN

Several IT officials expressed their disdain for inflated storage costs - whether cours ment, management software or maintenance - during a panel discussion at Storage Networking World

here last week Todd Thomas C1O of Austin Radiological Association PA, said his biggest concern now is the cost of maintaining storage equipment. "It would be cheaper for us to go into a new SAN environ-

tenance on existing cominment," he contended. However Thomas said that replacing the company's storage infrastructure isn't necessary, so be nisns to work on botter onetrolling maintenance costs. Charles Inches, IT director of Corner Banca SA in Lugano. Switzerland, said that resource management is the company's greatest storage cost. "It's managing all this stuff that's

ment than to continue main-

becoming a nightmare - costwise organizational-wise standards-wise," Inches said. At some point, as the distinction between production and nonproduction data blurs, all corporate users need to be involved in protecting corpo-

rate data and thus must have access to storage management tools. he said "Nowadays levenl e-mail is becom ine production data." Inches poted

The IT executions also said they aren't fond of capacity-based licensing of storage management poftware 'It should come bunded with your hardware." Thomas said "It's just outrageous," added Oliver Fischer-Samano, IT director at Baselocher Droductions I SA LLC in Clauseurs Laura Sanders, vaccorrectdent of systems storage products and solutions at IBM, responded that users have lone complained about such pricing issues, even as pricing models hase madeed

Sanders suggested that a key reason for such pracing complaints is that users have never had a budget for storage about it as a thing of value."

management coffusion for the thrilled they are talking about Lit1 have some there're thinking Storage hardware pricing said Inches, is comparable to a "Turkish carnet bazaar." He said users must wheel and deal with mechanic contrar



term relationship. Fischer-Samano said by can slash the cost of storage hardwage in half "iust by coine back and saving 'Hey I have a better quote," even if I didn't have it. They're willing to deal. Where they don't deal is with

atte, because it limits your choices (and is an) inhibitor to flexibility. The day you can move to a more heterogeneous environment, then you can intrisduce true competitiveness." and lower prices, he said. The panelists were also critical of vendors' efforts to build interoperable storage

MORE IN THIS ISSUE Don Termant found IT use abbe quarrient by alternatives of the SWW event Page 26 Are user complaints about the

industrywide high cost of storage

we hear, Incumbency leads

some vendors out there have

some hidden costs for device

drivers, for maintenance for

and touch the infrastructure

and hidden costs for replica-

Disk prices have been letron-

tion on every disk array.

any time they have to come in

to gouging. I think thus

wais? That's contrary to what

IBM Downplays Industry Pricing, EMC/Intel Pact



IRM officials expressed little the company's small and midsize businesses

(SMB) will be hurt by Intel Corp.'s agreement to resell EMC Corp. systems, announced at last week's Storage Networking World conference here. In an interview with Computerworld at the event. Andy Mon-

show, general manager of sys tem storage at IBM, discussed the EMC move, user complaints about high storage pricing and the state of tape technology. How do EMC's expanded manufac-turing and distribution partnerships

affect IBM's strategy? Number one, they're distribution a to want, which is a singlecontroller, low-end storage device. It didn't work with Dell, and now I think they're

product that nobody appears seeking other partners. [IBM] had tremendous

growth in [the SMB market] last year. We grew roughly three times as fast in SMB as in our large accounts. Sure we're always looking for the right kinds of partners. We just signed a very interesting alliance with a very very large industry player in one of the key segments. I don't think I can talk about it yet.

Do you agree with some analysis who say the IBM/Network Appliance relationship has created a sales conflict? In seneral, the partnership is going extremely well. We not products to market in record time last year 1 do not see conflict. To me, it's the uninformed talking to the uninformed

ping) between 35% and 40% year to year. That's not that different from what it was before. But, let's be honest, some folks charge you for down nese everything. We do get brought into a lot of accounts where the incumbent is pricing very high and (the user is) stuck.

ice tage is an enormous part Intel Agrees to Resell EMC Arrays reach around the planet," Duplessia said. "Dell doesn't sell into Asia-Pacific. And Dell doesn't even sell a of ISM's business, how do you doad with the drop in the amount of SC CORP and that intel Com int of the AY (mericial) So t or it's a fair assertion First of red to resel its low-end stor-

oge array fleough its cadre of voluedel said the lotal R212P1 nected to be available from the

Clara. Cald., gredicted that the deal Steen HSALLC

Tested hore 1910 0000 -- for the a

BMC's potential reach, and it's really tel will specifically enhance its

pages to meet the inc ements of networked storage ms. Intel will also help EMC or

tage being used? I don't think

all, tape, while it is largely used in the archive market isn't solely used in the archive markets. Second, the archivemarket is a pretty damp big market. It's four times the amount of capacity than the entire worktwide extremal disk market we shipped. The market is not shifting. Archive is really at the infancy of its explosion.

icrosoft Purchases Bi Tool Maker

rosoft Corp. has agreed to acousine ProClarity Corp., a. maker of business analysis and zation software for culting tion from Missough S/N er and exposing it to busius users. Terms of the deal vere not disclosed. Microsoft starts to use the tools from the riely held company with its OL Server 2005, Office Rusies Scorecard Manager 2005 fice Excel and Office Shareint Portal Server products.

in Updates Its Inalytics Software

crosystems inc. has relied out an ungraded version of its es analytics software for on. Version 5.0 of Sun's age Tek Business Analytics m is based on tech last year from the com w's \$4.1 hillion acquir rage Technology Corp. St Tek had acquired the softere in 2004 with its purch of Storability Software, Version tion functionality to id and repair remote storage.

Compuware Agre To Buy Irish Vendor

puware Corp. has agreed to puire privately held SteelTra for approximately \$20 million in ask. SteelTrace, a Dublin-ban er of business requirets management tools in a vare partner. Its tools andy integrated in Co nent and ou

SAP Pledges Sup For MySOL Datab

of the EDD and MySOL AB's open-source da have The see oks after SAP participated in on MySQL by year's end.

C ON THE MARK



Wi-Fi Zeros In On Laptops'...

agers, security managers and the cartographically challenged get a new whereabouts weapon this week. when Skyhook Wireless Inc. in Boston releases a beta version of its Loki mapping service for mobile users. VolP technology for

Skybook CFO Ted Morean saws that by adding the free Loki tool bar to your Web location of your lapton in the company's database of 5 million Wi-Fi access points in the U.S. Once you've registered, Loki can give you maps of where you are relative to other access points. Com-

mercial users of Skybook's Wi-Fi Position-

ing System software can track trucks equipped with laptops, say, and security managers can use the tool to

track down missing machines. Morgan says Skyhook has 100 employees who cruise 15 to 20 miles around major urban areas and pinpoint the locations of Wi-Fi access points. By July, he claims, they will have mapped out Wi-Fi coverage in areas where more than 70% of the U.S. population lives.

ficer at CounterPath Solutions Inc. in Vancouver, British Columbia, acknowledges that his company is only in the alpha stage. But CounterPath. which sells its iBeam softphone technology for PCs to voice-over-IP providers such as Vonage Holdings Corp. and Deutsche Telekom AG, has begun testing VolP software for handhelds used over Wi-Fi networks. One of the sticking

points, Fischel says, is Wi-Fi's

Frost &

Wi-Fi on handhelds . . .

, is on the berizon, lason

Fischel, chief technology of-

current inability to hand off calls from one access point to smother or users roam But he thinks that problem can be resolved, prob-

ably by next year. You don't have to wait for this week's re-

HOT TECHNOLOGY TRENDS, NEW PRODUCT NEWS AND INDUSTRY BUZZ BY MARK HALL

lease of iBeam 1.5 for PCs. which includes improved quality-of-service monitoring and policy enforcement By lune, iBeam users will be able to make calls from their Outlook or Notes address

books, Fischel says. Authenticate yourself via the fingerprint in your pectat. If Colin Hendrick gets his wish, starting

in this year's third courter large companies wall be handing our his SmartMetric biometric cards to employees who store their encrypted fingerprints in the card's inmemory database. If your finperprint matches the stored one the cord will outhoring you to get all the access riches and privileges you deserve for IT systems and corporate facilities Hendrick CEO of New York-based SmartMetric Inc., says the credit card-size device has its own custom CPU, memory, radio frequen-

ev transceiver. I FDc and power supply The trick was that will be to get the componentry minianurized," he says. The next trick will be to

get people to adopt biometric authentication tools. But Hendrick thinks he has an advantage because there will be no Big Brother database of fingerprints; instead, people will carry around their own biometric data. Pricine has yet to be set for the cards, though Hendrick says SmartMetric will sell biometric readers for less than \$10 apiece.

Next, fingerprint your content so data doesn't go where it isn't sup

posed to, "Unstructured data is where most proprietary corporate data is kept," says Sreekanth Ravi. CFO of Code Green Networks Inc. in Sunnyvale, Calif. He points

Code Green's CI-1100 applies

to source rode design documents, and merger and ac-

quisition papers as exameles To helo you keep tabs oo that information Code Cease calls its \$75,000 CI-II00 appliance. which does "deep-content fineerprinting" on information stored in more than 400 document formats. Ravi save The so-called fineerprints are mathematical representations of the content that the CLHOO can company against informs tion in data packets crossing your network. It's up to you to define how you want violations of content distribution policies handled, Currently, the CI-1100 can represent ITB of content in 5GB of fingerprints, Rayi says, Ry

year's end, he says, expect it

to be able to manage 10TR of data in the same fingerprint footprint. Protect app-to-app communications ...

with an automatic password tool. Applications often have hard-coded passwords stored so they can communicate with other applications. Making password changes to an application is often so cumbersome that they never get updated - creating an obvious security problem. Robert Grapes, an enterprise product specialist at Clookware Inc. in Vienna, Va., says his company's Server Password Manager software "eliminates having to hard-code passwords into applications." Version 2.5, available today. adds applications running on Windows servers to the soft-

wate's existing support for Unix and Linux apps. It also includes Unix root-password management capabilities, among other improvements Pricing starts at \$1,000 per application managed.



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After Bloom Departs nec Corp. shuffled its ative ranks as part of a corporate reorganization that is now pleted, two months after the sarture of Vice Chairman and recident Gary Bloom. Symantec cod its business units from six to three and streamlined tales operations. Enrique Sale Jeremy Burton and Kris Hage man will head the units. In add tion. Airi Gooal was named chief gy officer, replacing

EDS Plans to Expand Chinese Operations
Deciroric Data Systems Corn. plans to open at least two out-

sing centers in China and hire 2.000 staffers there over the next two years. The anouncement came shortly afte DS moved its Asia-Pacific warters from Australia to phai. The company is now ing for locations for the cing centers. The opera ns will provide IT outsour osting services for multi

AcAfee Buys Web Testing Company McAlee Inc. has purchas or Inc., for an un sum. SiteAdvisor, which mak are for testing Web sites to see if they contain apyware or virates, was founded last year by a group of MIT angineers. Last

Florina Joins Talway Chip Maker's Board Carly Fiorina, former chairwe an and CEO of Hewlett-Packs Co., has joined the board of octors at Talwan Sem or Manufacturing Co. as an innt member. Fiorins will

ath the company rele free browser tool bar designed to warn users when they visit risky

BRIEFS Data Security Policies Need Focus, Execs Sav

Documents should set high-level goals, avoid long lists of specific mandates

BY JAPKUMAN VIJAYAN SOCIE SIMM SCHOOL and enforceability are the keys to crafting corporate information security policies, according to IT managers who attended the approach Indicates Wheeled sounders ence here last week

"Pick your battles," Anish Bbimani, chief information security officer at IPMorean Chara & Co. adviced other at tendees during a panel discussion. He added that instead of having a bundry list of compliance items, companies need to be "crystal clear" on what their security objectives are and spell them out in a policy that workers can easily understand and that is high level

an extended period of time. For instance, IPMorean Chase has set a relatively short list of "must comply with" requirements that encapsulate the New York-based company's high-level data-protection poals. Bhimani said. It has also implemented a broader set of should comply with" items that are more along the lines

of hest practices, he added "One of the things to consider is, how many controls are you asking people to comply with? Just focus on the things that matter" Bhimani raid "By definition, policies are

mandatory," said Charles Pask, managing director at ITSec Associates Ltd. a connection firm in Leicester, England, As a result, they should include only items that workers absolutely must comply with. Pask said. Specific security

standards and controls should then be implemented as part of an overall risk-assessment program, he added. Sandy Bacik, corporate security officer at Tekelec, a

How many controls are you asking people to comply with Just focus on the things that matter

vider of telecommunications services, said IT security poli-

cies should mandate behavior at a bigh basel and mand to be kept separate from security standards and guidelines. For instance, a company could have a corporate policy protect their information assets based on the importance of dose Beath sold A released guideline could inform busi

ness managers about the need for strong access controls while a standard could specify the use of a particular pass word approach, she said. Bhimani recommended that companies make their security

policies technology-agnostic as well. "You can't mandate the use of a specific technology in a policy," he said, adding that by doing so, you lose the flexibility needed to quickly adapt to both technology and hesiness chanese

Information security policies "written by IT managers for IT managers' seldom work said Tom Walth an independest consultant in Oweland Park, Kan, It's better to craft one set of policy objectives for business users and another for the IT staff. Walsh said. The latter should cover isPolicy Advice

sues that pertain specifically to IT workers, such as data backup, configuration manaccment and change-control procedures he said Security policies also need

to be easily enforceable to be effective, said Philip Majer. vice president of the informa tion security, emerging technology and network group at Inovant Inc., Visa Internation al Inc.'s IT unit. Therefore, it's a good idea to yet all policies with the people who will be responsible for enforcing them. as well as with internal technology experts, Maier said. For multinational companies, writing security policies that retain the same meaning

when translated into different languages can be a challenge. Dack said Similarly terms that are acceptable in the U.S can create problems elsewhere. Majer poted that Inovent had to replace references to "mas ter" and "slave" systems after employees in Asia found those

words to be objectionable.

Microsoft Broadens Windows Support for Mobile DB will be renamed SOL Server get a better handle on what sion libes with his own

Microsoft Corp. last week said

that it plans this year to extend the mobile version of its SOL Server database to run on all versions of Windows.

SQL Server 2005 Mobile Edition, which now works on handheld devices that use Windows CF and Windows XP Tablet PC Edition, will eventually support Microsoft's full line of operating systems, including the upcoming Windows Vista client operating system. The mobile database

Everywhere Edition A Community Technol

ogy Preview release of SOI Server Funrywhere should be ready this summer as a 2MR download with a communist release due by year's end, said Paul Flessner, senior vice president of data and storage platforms at Microsoft, in a presentation to SOL Server

users in San Francisco SOL Server Everywhere will be available to users under a free license. Flessner said the software should help CIOs

he called an "explosion" of data putside of corporate data centers, enabled by smarter hardware and less-expensive memory and storage

"A lot of companies are consolidating more into their data center, but it's very naive to think all data will live there. expecially when handhold devices in five years will be as

powerful as your PC," he said. Russell Wong, senior director of IT services at Paradiero Management Services LLC. stid Flessner's handheld vi-

Paradigm, a Concord, Califbased medical care provider. employs nurses to check on rently, the nurses lack handheld devices and must return to the company's central office to enter patient information into its SQL Server 2000 data-

base. Wone said But he added that mobile devices equipped with SQL Server Everywhere could help Paradigm to provide real-time data input and access capabilities to its murses.

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Chinese IT Policies Raise II S Concorne

ECHNOLOGY DOLLCES that limit foreign companies' access to China raise doubts about the Chinese government's commitment to World Trade Organization midelines, accord-

ing to a global report on trade barriers issued by the Office of the U.S. Trade Representative. The report issued but week conered more than 60 foreign markets. It

criticized China for pursuing "unique national standards that could lead to the extraction of technology or intellectual property from foreign rights bolders" and for draft regulations mandating purchases of software produced in China

Io addition, the USTR's report took the Chinese governfering in "commercial nontistions own royalty nayments to intellectual property

rights holders in the

area of 3G standards

for advanced wireless

An International IT News Digest

The report did note, though that China has made some progress in revamping its laws to strengthen intellectual property protection.

Efforts to contact Chinese officials for comments about the report were mmooorful

BSHMAFRIEMON IDCNESS SERVICE HP Spends Big on IT Equipment in Taiwan

EWLETT-PACKARD CO. last were speet \$18 halion (U.S.) in annual to procure IT components and speet \$18 billion (11.5.) in Taiwan systems, the head of the company's Taiwan operations said late last month. HP outsources production of hand-

held devices and desktop and laptop PCs to companies in Taiwan said Rosemary Ho, managing director of HP Taiwan, during GLOBAL FACT

groundbreaking ceremonies for four chin plants that Powerchip Semiconductor Corn is huilding in Taichung. The total number of PCs sold HP accounted for 39% of the \$45,72 hillion

worth of electronics

products that Taiwan-based companies exported last year, according to a report by the Taiwanese government. to comparison, Dell Inc. sourced about \$5 hillion worth of FT year from com panies in Taiwan last west according to the report.

INDIAN MYSTERT ING NEWS SERVICE

Korean FTC Probes Qualcomm, Partners SECUL

OUTH KOREA'S Fair Trade Com-Smission is examining the business dealings between Qualcomm Inc. and three handest makers in that cour try, the San Diego-based chip maker disclosed last week

Outleann said that officials from the commission visited the offices of its South Korean subsidiary last Tuesday. as well as those of phone makers Samsuny Electronics Co. LG Electronics Inc. and Pantech & Curitel Communi-

The U.S. company described the questioning as an inquiry, not an official investigation, and added that the South Korean commission dido't explain the reason for its visits. In a statement, Qualcomm President Steve Altman

said the company's business practices "are lawful and pro-competitive." . JAMES NICCOLAI, IDG NEWS SERVICE Compiled by Mike Bucken.

Briefly Noted

www.computerworld.com

Dimension Bata PLC has wen a three-year contract worth \$40 mi lion Australian (\$20 million U.S.) from the South Australia state

III COMPLITERWORLD TODAY (AUSTRALIA) STACE

Seem Flectric Co. plans to app or well's ed by an earthquake in 2 o, which is in the midst of a ectoring, will also torn the c idary, te

B MARTYN WHI IAMS ING MEWS SERVICE SAP AG has acrosed to ac-Systems Inc., a maker of enter

et. Calif., for an und price. SAP said Virsa's tools are d of to help otors and III CHINA MARTENS

ING NEWS SERVICE

Hosted BI Promises to Boost Access to Data Emerging services | It can also notify users when

Str Lanka in 2005

expected to cut costs, add security

BY HEATHER HAVEHAVER Some companies are eveing emerging on-demand business intelligence offerings to boost age for polimited users. access to data without having to make additional infrastructure investments. Such interest is prompting

Business Objects SA, SAS Institute Inc. and some smaller vendors to bump up their bosted BI offerings in areas like reporting and analytics. Paris-based Business Objects this week will roll out

CrystalReports.com, an ondemand version of its popular Crystal Reports software. The new service will offer external users access to Crystal Reports documents via the Web.

new or updated reports are available

A basic version, available this week, supports up to 10 external users. A premium edition, which will be available by June, will offer unlimited stor-

AbeTech Inc., a Maple Grove, Minn,-based bar code and labeling company, uses Crystal Reports to provide status reports to about 15 key clients. The company expects that the new premium service

will let it provide reports first to 64 and eventually to 200 clients, said Chief Operating Officer Tim Anderson. The packaged software

currently requires half of one employee's time to distribute reports to the 15 clients, and "one of the higgest complaints we get from our clients is not getting status updates as often as they would like," he said. "The ability to now send Anderson, who plans to begin using a beta version of the service as soon as it becomes

available, expects it to be able to provide hourly status reports to clients without requiring more work from AbeTech employees.

Process Changes

C.I. Land, e-marketing director at Applied Voice and Speech

Technologies Inc. in Footbill Ranch, Calif., said last week that he plans to begin using a beta version of the Business Objects premium service within days.

The company currently e-mails Crystal Reports documents to external partners and other users, trusting that the data will remain secure. The on-demand service offers pas

word protection that will ensure that only authorized users can view the properts, he said

those reports up to some common workspace and have others access that is extremely powerful." Land said "It will redefine the way people use

CrystalReports.com

Crystal Reports."

Business Objects is the first enterprise BI vendor to begin offering query and reporting on demand, said Dan Vesset. an analyst at IDC. Although Business Objects is initially targeting the midmarket, it will likely get uptake from larger enterprises who may have prior experience with

other hosted solutions," he said. SAS, mesowhile, plans to enhance its on-demand marketing automation package and may offer its marketing optimization and risk optimization analytic software as an on-demand service said Richard Roach, director of SAS Solutions OnDemand

The company is also looking to come out with specialized vertical services, including analytics for banks, he added Roach declined to provide

more details on plans for the new services.

Users Test Expanded IBM SOA Offerings

Hope new tools, services can improve development, business processes

It's wasn't so much the manuration of technology that promoted Jim Haney, CIO

at Harley-Davidson Inc., to implement a service-oriented architecture (SOA). It was the realization that "I don't have a lot of other tricks to pull out of my IT toolbox," he explained. Haney opted to "decouple"

various IT systems at the Milwaukee-based motorcycle manufacturer and move toward implementing an SOA after deciding that Harley. Davidson developers can't continue to build software the same way it has been built for

the past 20 years, he said. "Projects have to show returns much quicker," he said. "You need to be a lot more

flexible" Haney spoke during a teleconference that IBM held last week to arresil a clear of new SOA products, upgrades and

Seamless Changes Harley-Davidson is testing

IBM WebSphere middleware tools for use in an SOA initiative. The company's goal is to use Web services to build business processes that can be quickly changed to match shifting needs. Haney said. When Harley Davidson's

SOA is fully implemented. Haney said, be expects the company's IT department to he able to change a business process - such as reviews. ine advertising in the spring. when people are more likely

services. We can change one. fandl do it onickle" be said During the teleconference. IBM touted II new products and 20 upgrades that officials said can help users overcome barriers of entry to building an SOA. Some of the products to buy - without having to are shipping now, and all of

change underlying IT systems.

plications, we can bring these

[processes] to the forefront as

"By decoupling all those an

IBM SOA Undates

them will be available within six months IBM sold Bob Berckman, assistant

vice president at The Pen Boys said the Philadelphia-based auto parts and repair company has been working with IBM for two years to replace legacy business applications at its 993 stores with an SOA built using WebSphere Application Server and the WebSphere broker for enterprise messaging.

The company has replaced some individual pieces of its infrastructure - such as a point-of-sale application - while keeping other legacy business applications running smoothly by using a Web services-based integration layer, Berckman said. The Pen Boys is now installing new inventory software without affecting the point-of-sale application, he added.

Stan, I wish everything was as dependable as a Ricoh color printer. That's why they call it wishful thinking, Jerry,

> Ricoh dependability moves your ideas forward RICOH



Users Test Expanded IBM SOA Offerings

Hope new tools, services can improve development, business processes

BY HEATHER HAVENSTEIN It's wasn't so much the matu-

ration of technology that prompted fim Honey CIO at Harley-Davidson Inc., to implement a service-oriented architecture (SOA). It was the realization that "I don't have a lot of other tricks to pull out of mv IT toolbox," he explained.

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Hancy spoke during a teleconference that IBM held last week to unweil a slew of new SOA products, upgrades and services

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change underlying IT systems "By decoupling all those applications, we can bring these Innocessed to the forefront as services We can change one. landl do it quickly "he said

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IBM SOA Undates

them will be available within six months, IBM said Bully Bornels man market and

vice president at The Pen Boos. said the Philadelphia-based anno parts and repair company has been working with IBM for two years to perbacklernes business applications at its 913

stones with an SOA built usano WithSohors Apple: ution horses and the WebSphere broker for enterprise messaging The company has replaced some individual pieces of its infrastructure - such as a point of sale application - while keeping other legacy business applications running smoothly by using a Web services-based integration layer, Berckman said. The Per-Box's is now installing new inventors software without affecting the point-of-sale anplication, he added #

Stan, I wish everything was as dependable as a Ricoh color printer.



That's why they call it wishful thinking, Jerry,

R-coh dependability moves your ideas forward



Continued from page I

Mare

tle fanfare, enables Windows XP to men on the new Mass. just as it does on deskton and Inpeop PCs.

Boot Camp creates a harddrive partition for Windows XP and lets users choose between it and Apple's Mac OS X operating system each time they start their computers. The dual-booting capability "definitely makes the Mac more attractive," said Micah Lamb, a microcomputer support specialist in the IT ser-

vices department at Baylor University in Waco, Texas Lamb said via e-mail that Baylor often has end users who prefer Apple's bardware to PCs but need Windows in order to run applications central to their jobs, Boot Camp will let them have it both

were he noted In addition, the new software essentially makes the Mac two computers in one. Lamb said. "You can buy a traditional Wintel box and run Windows only, or you can buy a new Mactel hoy and our both Windows and Mac OS X. John Halamka, CIO at

Continued from none I

a hardware vendor in Tajwan.

said Bruce Buckley, director of

census-related business devel-

The devices, which are

still under development, will

be based on consumer-grade

handheld technology that has

semirusped, Buckley said. For

designed to have a 10-hour bat-

tery life so census staffers can

The devices will also in-

clude a cellular data radio for

sending encrypted informa-

example the handbalds are

work all day be said.

Census

coment of Uveria

Harvard Medical School and CareGroup Healthcare System in Boston, said the school has about 4.000 Macs and a roughly equal number of Windows-

Now students and faculty members can choose "the best tools for their specific peods " Halamka said. Users who have tried the beta release of Boot Camp have reported that it makes Windows XP

applications rup "bloringly SOFTWARE FAQ **Boot Camp**

NAT IS IT? Bets sol n is an RIMB He that can ed at wome specie

THE SOFTWARE on of the off in one

AT ELSE DO USES ED? Noc OS X 10.4.6 The latest ! for their Macs, at less

backup purposes, Buckley said. Warner said Census Bureau

officials didn't specify the use of Windows Mobile 50. The by High Tech Commuter Corn bureau's request for proposals listed general functional requirements including usability and reliability levels, instead of setting any technology mandates. "It didn't matter to us if it was Windows Mobile 50 or something else," Wagner said.

"It was up to [the vendoes] to figure out the right solution. The team led by Harris was chosen after a demonstration of handheld prototypes by all the bidders in January, he added. The prototypes had to

include mapping support, an application for updating the addresses of residents, and a time-and-expense form for use by census workers

Buckley said Harris chose Windows Mobile 5.0 for the handhelds primarily because fast" on a Mac, he said Not everyone is sold on Boot Camp, though. "It's not as neat and clean

as it might sound," said Roses Kay, an analyst at Endpoint Technologies Associates Inc. in Wayland Mass "They've filled a hole here, but it's more of an experimental thine 1 don't think it'll change the game that much."

Depending on how users format Windows XP on their Macs, they may or may not be able to read and write data between the Windows and Mac OS X partitions Kay said And businesses still have to buy

a Windows XP license from Microsoft for each system that Boot Camp runs on, he noted. A Work in Progress

"The proof of the pudding will be to see how good it really is - how stable and support able, and how scalable " said Alastair Behenna, CIO at Harvev Nash PLC, a London-based workforce recruiting and IT

Harvey Nash runs Macs as well as PCs. Behenna said he sees no compelling reasons to move toward Apple's hardware at this point, but he added that he will watch the

the Microsoft

can run custom-

ized versions of

off-the-shelf ap-

plications that

the Melbourne.

integrator has

experience with

ware for security

conchronisation

All data col-

lected by census

takore will be

of the pudding will be to see how good it really

how scalable

development of Boot Camp Apple itself said that some Mac features won't work with Windows XP because of hardware incompatibilities. That Includes its USB modem, wireless keyboard, wireless mouse and remote control device Boot Camp is available

now as a free download that works for only a limited time. Apple said the software will be included in the next major release of the Macintosh operatine system. Mac OS X to S which is code-named Leopard and is expected to be ready late this year.

Within the past few weeks some backers created a kludgy way to boot Windows VD on Intel-based Macs. According to Apple, Boot Camp simplifies things by providing a graphi-

notifying them

that residents

on their routes

have already filed

paper-hased cen-

tus surveys and

can be skipped.

there will be no

keyboard on the

stead, data will be

input primarily by

tapping a stylus on

The handbelds

also aren't expect-

ed to have voice

capabilities, a decision made

to comply with government

security requirements and

handhelds; in-

a color screen.

Buckley said

for Apple executives. "Apple is

formes Niccolai of the IDG News Service and freelance writer

census takers could be allowed to talk up the handhalds to their crew leaders only The contract with Harris also covers the IT infrastructure, hardware and software needed to support the handhelds at about 455 local Census

Bureau offices, Dell Inc. will supply PCs and servers, and Oracle Corp. will provide software for integrating data from the handhelds with information in back-end systems Other vendors involved in the project include Accepture

Ltd., Unisys Corp. and Headstrong Corp., an IT consulting and systems engineering firm in Fairfay Ve

Craig Mathias, an analyst at Farpoint Group in Ashland. Mass., said he isn't aware of any deployments of wireless handhelds that are inner than

operating system Fla-based systems That includes softand wireless date

transmitted over the Sprint Nextel network immediately or at set intervals, according to Buckley. If workers fail to send data as scheduled, the handhelds will do so

keep costs low, he said However, Wagner said voice on their own, he said. In addisupport might be added if its tion, the Census Bureau will use could be controlled. "We be able to send information haven't dismissed it entirely," to workers, such as advisories he said, noting that perhaps

The proof is - how stable and

supportable, and

ALASTAIR BEHENNA, CO. HARVEY NASH DUC

the process of creating the required partition, burning a CD with all the necessary Windows drivers and installing the operating system from a Microsoft CD. Apple has no plans to offer Windows XP itself, said Brian

Croft senior director of Mac OS X product marketing, "We want to make it clear that Apple is not poing to preinstall or sell Windows." Croll said "This party is BYOW

cal application that walks

users step-by-step through

In a statement, Microsoft said it is "nleased that Anole customers are excited about running [Windows] and that

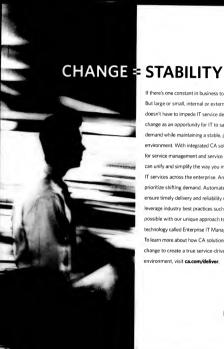
Apple is responding to meet the demand" Ted Schadler on analyse at Forrester Research Inc. said the decision to offer Boot Camp was really a no-brainer

a hardware company - they build software to sell the hardware," be said. "The mestion really is. Why not support the installation of Windows on their computers?")

Yuval Kossovsky contributed to this store

the one planned by the Census Burran P

tion to Census Bureau offices over a dedicated Sprint Navnel Corp. network. A traditional phone-line connection port will be custom-installed for



If there's one constant in business today, it's change. But large or small, internal or external, change doesn't have to impede IT service delivery. Think of change as an opportunity for IT to satisfy fluctuating demand while maintaining a stable, productive work environment. With integrated CA software solutions for service management and service availability, you can unify and simplify the way you manage complex IT services across the enterprise. Anticipate and prioritize shifting demand. Automate processes to ensure timely delivery and reliability of service. And leverage industry best practices such as ITIL. It's all possible with our unique approach to managing technology called Enterprise IT Management (EITM). To learn more about how CA solutions can stabilize change to create a true service-driven IT environment, visit ca.com/deliver.

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IBM.





_INFRASTRUCTURE LOG

_DAY 3S: Whoa! Came in today and found a black hole. Information goes in but doesn't came out. This is bad. _DAY 36: The black hole just sucked in three interns.

HR is not pleased.

_DAY 38: I've taken back control with IBM Information Management middleware. It's built on open standards. Tatally scalable. Seamlessly unites all our critical information, whatever its source. Now our info has real business value, and we can use it in innavative ways ta help spur growth.

_We got everything back from the black hole. Except

Information Management

See innovative IBM Info Management solutions in action: IBM.COM/TAKEBACKCONTROL/INFOMGMT

Microsoft Picking Up CRM Customers From Its Rivals

Says Version 3.0 corrects earlier flaws. integrates better with Office, FRP apps

ETHORICH a late. comer to the CRM business Microsoft Corp. has quietly been luring customers away from more established rivale such as Siebel, now part of

Oracle Corp. Several marry at Microsoft's Convergence 2006 conference here late last month said they turned to Microsoft Dynamics CRM because of its integration with other Microsoft applications, including Dynam-

ics ERP and Office. In addition, a half-dozen users said Version 3.0 released last fall, corrects many of the performance, data synchronization and other problems in Versions I and 1.2 of the Micro-

soft CRM software Global Comfort Systems plans to replace its Siebel call center application with the Issest Microsoft CDM was sion because it's integrated with the other applications and costs less, said Andrew Fralick, IT director at Global Comfort unit Webarto Product North America Inc Stockdorf, Germany-based Global Comfort expects the cost of installing Microsoft CRM to be about the same as it would be to uperade its Siebel

software, Fralick said. His unit in Fenton, Mich has been usine the Microsoft CRM software for about two years through multiple yersions he called the newly installed Version 3.0 an enter-

prise-class product Fralick said Webasto's sales force did suffer through the defects of earlier versions of the Microsoft CRM software The [ioitial] product wasn't a floo," he said. "It just didn't work as billed. Now they have an excellent new version that's

finally there? "Worth it in the End"

The integration with Microsoft applications prompted Wilson Language Training Corp. in Oxford Mass. to replace its Sighel 6.0 CRM software with Microsoft CRM 1.2 in January 2005, said Brian Kretchman, technical development manager at the

censing, end-user retraining and the data cleansing associated with replacing Sighel, it was "worth it in the end" said Kretchman, a panelist at the

Convergence conference Kretchman said customiza tion of the Siebel software by sales personnel led to 17 support problems. The more rigid Microsoft CRM process improved the efficiency of the software's 60 users, he said. Wilson intends to uperade to Microsoft CRM 3.0, most

likely this fall. Kretchman said

CROSOFT took a step into the sted CRM market at Conver-

ce 2006 here, announcing the resoft Dynamics CRM Profes-

d Edition for Service Provi

The new release targets value

ers that would use it to deliver a

add access the software via a W

er or an Outlook client.

nce February, IT consults

ed offering to end upers, who

ded resolves and b

Desnite the cost of the li-

Helene Cole, CEO of Altara an integrator in Baskins Rider, N.I., said her comeany replaced its Siebel software with the Microsoft offering in 2002. Cole said the Siehel implementation worked well for large customers of its in-

tegration services but proved too complex and costly for internal use The Quiznos Master LLC which sells sandwich shop

franchises, replaced a home grown CRM application with Microsoft's CRM 1.2 offering in February 2005, said Kristic Reid, IT project manager for the company's Quiznos Substante Onignos now has 550 users of Microsoft's CRM software and will upgrade to Version 3.0 in the next couple of months she said Reid said Denvenbased

Earlier Microsoft CRM versions] just didn't work as billed Now they have an excellent new version that's finally there ANDREW COLLICA

for consolidated reporting. The former CRM system required several different acplications to create reports. she added.

"I'm not surprised to see fsmall and midsizel companies switching away from Siebel." said Iosh Greenbaum, an analyst at Enterprise Applications Consulting in Berkeley. Calif. "The cost and burden of a big CRM product like Siebel doesn't really make that much sense in (that) market "a

Quiron pror Denamics CPM Microsoft Steps Into Hosted CRM Business

Cisco Dials Into Call Analysis Offers third-party

tool to call centers BY MATT HAMBI CH Cisco Systems Inc. is moving

to tap into an emerging market for speech analysis software that call center supervisors can use to track conversations with disgruptled customers. Last month, as part of a wider announcement of unified communications tools. Cisco unveiled Unified Customer Interaction Analyzer, a managed

service that is built around

eLoyalty Corp.'s Behavioral

Analytics (BA) software. The software developed by Lake Forest, Ill.-based eLoyalty can graphically scan calls to detect problems. For example. it can tell if a customer hecame angry with a call center

agent before being transferred to a supervisor or was put on hold for an unacceptable length of time. Cisco executives said at VoiceCon Spring 2006 in Orlando

Trouble spots in a call are showe on a PC screen as red dots plotted on a horizontal line. Users can click on a dot to get a brief description of

what happened or even listen to that portion of the call. Uniprise, a Hartford, Conn. based division of United-Health Group Inc. that manages bealth care benefits for large companies, is an eLovalty customer that has been using BA since December.

About 300 call center agents have the software oow, and it will be rolled out to all 3,000 of the unit's U.S.-based agents this year, said John Reinke. senior vice president of the Uniprise Innovation Lab in

Minnetonka, Minn. Uniprise has spent "multiple millions of dollars" on the project but expects a payback

within 10 months. Reinke said. Its broader soals are to use the software to improve employee retention and keep health care insurance customers happier, he added, "We're seeing if we move the needle on customer distress, and we're assuming that In turn will improve the

customer experience" But success requires more than just the use of software like BA, Reinke cautioned. You can deploy it. (but) if you don't adopt different behaviors in the call center, you won't net any advantage," he said. Chris Beck, an enterprise voice architect at Career Education Corp. in Hoffman Estates, Ill., saw a demonstration of Cisco's Interaction Analyzer at VoiceCon and said he considered it to be the "most intellectually exciting" product at the show. However, he added that his company has only 25 call center agents and probably wouldn't consider Cisco's

offering at this point. Future versions of BA-type tools may be able to automatically advise agents oo how to handle individual callers, said Gartner Inc. analyst Marthew Goldman. Rivals to eLoyalty include CallMiner Inc., Nice Systems Ltd., Utopy Inc. and Verint Systems Inc., Goldman and other analysis said.

Novell Struggles to Maintain Utah Base

BY ERIC LAI

Jim Pulliam remembers his disbelief when he first arrived in Utah to take over as CIO at Salt Lake Community College two years ago. "I couldn't believe how many organizations [in Utah] were still on Novel. DNetWare LAN software. It

past shocked mc.

Pulliam said Sait Lake Community College was one of the few institutions of higher learning in Utal's tighe knil education community that for the most part ran software from Microsoft Corp. rather than Novell Inc.'s products.
The school uses Windows Server, Active Directory, Outlook and Exchange.

But outside of the education market, Utah IT operations

are beginning to abandon Novell. Indeed, several IT managers said that they have recently migrated from Novell soft-

ers said that they have recently migrated from Novell software to Microsoft offerings or are considering such a move. Novell bad few answers for users moving to Microsoft until it released Open Enterprise Server the Linux based suc-

users moving to Microsoft until it released Open Enterprise Server, the Linux-based successor to NetWare, last year. In addition, during its annual BrainShare user conference in Saft Lake City last month, Novell said it plans to bundle its disparate products into a

SUSE Linux-based suite.
Some say such moves may
be too little, too late for Novell,
since it's losing customers
even in Utah, where the company was founded in 1983 by
four Brigham Young Universi-

ty classmates in Provo, where it was based until 2004. Over the past couple of years. Novell has shifted away from its Utah roots, moving its core development team to Nuremberg, Germany, following the 2003 acquisition of

SUSE Linux AG. The company relocated its headquarters to Walham, Mass, a year later. Utah's largest hospital opeerator, Intermountain Health Care Inc., replaced Novell's GroupWise collaboration software with Microsoft Exchange in 2004, citing problems with reliability and incomplete features. The move cut first-year operational costs by 39%, said

Kyle Andersen, director of enterprise systems. Nu Skin Enterprises Inc. in Provo finished porting its e-mail and file and authentication servers to Microsoft from Novell last year, said Reed Wilson, global infrastructure architect. There were just a few people with whined," he said. "But good heavens, our CIO at the time came from

Novell, and be didn't think it

There were just a few people who whined. But good heavens, our CIO at the time came from Novell, and he didn't think [switching to Microsoft] was such a bad decision.

was such a bud decision."

To be sure, the Novell base still includes several large. Utah organizations, such as the state government, Brigham Young University, America First Credit Union and Overstock.com Inc.
Novell officials downwlood.

the significance of its lost Utab customers. "People have been migrating off NetWare for wars. This is an old, old discussion " said a Novell enginesman. He said the new offerings are likely halting the slide. Gordon Haff, an analyst at Nashua, N.H.-hased filuminata Inc., said that Novell is starting to do the little things. - such as increasing the number of applications certified to run on SUSE Linux to several thousand - that make upgrading to its Linux offerings etteration to MatMore

Stan, her de yeu leop thee Rical printers so dependable?





oh dependability moves your ideas forward.

FDA Revamping IT Development Process

The U.S. Food and Drug Administration but bunched a project to overhaul its application development process to provide management with a view into the agency's IT

The 12-month project. which began in February aims to help FDA managers better monitor the quality and productivity of contract and in-house teams in eight decentralized development centers. Ray Russo, director of the Office of Business Enterprise Solutions in the FDA CIO's office, said the effort should inject standard processes into secrety application development projects and ensure that IT managers can monitor their returns on investment

As part of the project, the asoney has already started rolling out a new IT covernance tool, Cast Software Inc.'s Cast Application Intel ligence Platform, which provides a comprehendue view of "When you have a lot of

things outsourced to a lot of contractors, it can be difficult to get the kind of view of what is going on in that code [that] you would like " Pusso said

Product Features

Russo said the tool from New York-based Cast can provide information about the com plexity of code and about the cost of projects. It can also help determine whether costs are likely to grow or shrink over time, he added.

The software will be used first to monitor a registry and listing system, where users register food and drug facilities that the FDA regulates. Over the next six months.

the FDA project will extend use of the Cast tool to monitor the development projects at its Office of Regulatory Affairs and its Center for Drug Evalu-

ation and Research. According to Russo, the Cast software should be moni toring all FDA applications by February 2007.

As part of the project, the ment efforts aren't duplicated. FDA also is evaluating other a task that the Cast product governance tools that will be

used to ensure that develop-

can't do Russo said Melinda Ballou, an analyst

at IDC in Framineham, Mass... said the FDA is tackling one of the higgest IT challenges that large organizations now face - petting consistent and accurate metrics about project successes or failures.

One of the barriers to injectine governance into application-development projects she said, is a reluctance by users to change life-cycle software, such as tools for managing requirements or source code.

How can you protect your network and your peace of mind?

(We've got the answer.)

The report found that the

SEC Must Shore Up IT Security, Says GAO released late last month by the Government Accountability Обсе

SEC has corrected or mitigated only eight of SI weak nesses cited by the GAO in a report last year, a response the oversight office of the U.S. Congress called inadequate. The report identified 15 new

vulnerabilities in addition to those on last wear's list Corrective actions taken by the SEC over the nost year include replacing a vulnerable. publicly accessible workstation and developing and implementing change-control procedures for an undisclosed

major application. The report found that the finuncial regulatory somey has not yet effectively controlled remote access to its servers. established adequate controls over passwords, or managed acress to its systems and data In addition, the SEC has ver to securely configure network devices and servers or implement auditing and monitoring mechanisms to detect and

track security incidents **Weak Controls** Most of the newly discovered weaknesses are related to electronic-access controls such as user accounts and passwords. access rights and permissions,

and network devices and services the GAO said For example, the GAO said the SEC has not adequately controlled user accounts and passwords to ensure that only authorized individuals can ac-

cess its systems and data. In addition the CAO found that the SEC permits users to modify sensitive information or critical system files and directories without required permissions, increasing the risk that the SEC's applications and sensitive financial data

could be compromised. The report determined that the vulnerabilities continue to leave sensitive SEC financial information without sufficient protection against disclosure.

modification or loss. Until the SEC fully develops, implements and documents key elements of an information security program to ensure that effective controls are in place and are maintained, its information systems will remain at risk and be vulnerable to dis-

ruption, the GAO said. In a written response, the SEC said it agrees with the agency's findings and is focusing on implementing its rec-

DON TENNANT

Alternative Lifestyle

F THE RUMBLINGS of the attendees at last week's Storage Networking World conference are any indication, the IT community — users and vendors alike — is so desperate for alternatives that exploring them has become some-

thing of a professional lifestyle.

That's not an inherently bod thing. Satisfaction with the status good breeds complicately, which will sayach progress faster than you can say 'stan-daydride external disk subsystem.' Moreover, when the subsystem's more subsystem of the subsystem's cone party sint performing up to speed or living up in bits odd of a particular bauguin, it can still he good thing. As long as shown that the subsystem's control of the subsystem of

it's a vendor that's dissatisfied.

Take, for example, the announcement last week of an agreement between EMC and Intel, ander which
intel will sell rebranded low-end
EMC disk arrays. It's hard to imagine
EMC disk arrays. It's hard to imagine
that EMC would have forged that
agreement if it was totally satisfied
with its existing arrangement with

Deli to resell low-end storage systems. Andrew Monshaw, general manager of systems storage at IBM, said in an interview with Computerworld's Lucas Mearian last week that the Intel deal marks the beginning of the ond of EMC's pact with Dell' I think perhaps we're seeing our first signs

of divorce here. The said.
Of course, that's wishful thinking
on BMS part. EMC and Dell are
making a ton of money from their relationship, so they'll stay together for
the sake of the back. But the Intel
deal certainly indicates that EMC is
antsy enough about Dell to want to
hedge its bets. Whatever dissastistation lies there has created an alternation lies there has created an alternation of the same of the same of the same of the
charted with Dell's customer service
charted with Dell's customer service
that the same of the same of the same of the same of the
preformance will no doubt embrace.

performance will no doubt embrace. That's not to say that EMC doesn't have its own disenchanted users to deal with, Oliver Fischer-Samano, IT director at Baerlocher Productions USA, told Mearian last week that he has refused to buy small storage systems from EMG in the past because its sales reps soured him on the company. His problem isn't with the Channel, but, with EMG itself, which

he finds "very arrogant." Jerry Bartlett, ClO at TD Ameritrade, said in a panel discussion I moderated last week that his company is almost exclusively an EMC shop. But he indicated that nothing is necessar-

ily forever.

That enclusivity is "a bit problematic because it limits your choices,"
Bartiett acknowledged. "That is one of the inhibitors to flexibility. The day you can move to a more heterogeneous environment, then you can introduce true competitiveness."

But getting to that heteroeneous

state requires storage vendors to fulfill their promise to deliver interoperable products, and Barriett gave them a grade of C- on that score. Another member of the panel, Charles Inches, IT director at Corner Banca in Lugano, Switzerland, was less charitable.

He gave the vendors a D.

"I'm very, very critical" of the vendors' track record on interoperability, he said. "Almost all the vendors are bunched up into the [Storage Net-

working Industry Association], but they'te not delivering yet." Inches was equally scathing in his assessment of storage vendors' pricing policies. Storage pricing is a "Turkish carpet bazzan," Inches said, responding to a question I posed on the transparency and sensibility of pricing practices. The poselists were

especially critical of having to license storage management software on the basis of server capacity — a practice that Fischer-Samano called "just outrageous." I came away from SNW convinced

I came away from SNW convinced that what we need is a lifestyle change, because having to constantly be on the lookout for alternatives is lousy. Maybe being satisfied isn't such a bad thing after all. »

Don Fourant



MICHAEL GARTENBERG

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IT Could Be Drafted Into Boot Camp

TVE TALKED in the past about how IT departments need to rethink their positions against the widespread use of Appie computer and Mac OS X in their organization. Fve talked about the Macinton blue arther times down the Macinton blue arther times down the Macinton blue arther times down the Macinton blue arther times about the Macinton blue arther times the platform, proprietary war for the platform, proprietary war for the platform, proprietary war for the order to the platform proprietary and the price of entiry just that different from what you'd pay for a system from any Title 1.

PC vendor. I won't even go into attacks and snyware being virtually nonexistent problems for Macusers Instead I'll focus on three new reasons for business users to look more closely at Apple Computer: the company's migration from Power PC to Intel processors, its appoundsment of Boot Camp for running Windows XP noticely on an Intel

ats announcement of Remaining Windows XP natively on an Intel Mac, and the recently announced delay of Microsoft's Vista operating system. All are compelling arguments for deploying Apple systems ments for deploying Apple systems.

where they can do the most good. Many Mac users were shocked last year when Apple said it would move to Intel chips, but even before last week's Boot Camp appouncement. I saw this transition as providing an opportunity for IT departments For IT, the most important aspect of the Apple migration to Intel isn't the boost in performance over time-That's not ao IT issue. For IT, the most important aspect of the Apple migration to Intel is what Apple on Intel means for the many business users who need to run Windows for corporate applications that just aren't available on Mac OS, Boot Camp will resolve a lot of potential holdure to adoption

Now io beta and available for download. Boot Camp allows anyone with an Intel Mac and a copy of Windows XP with Service Pack 2 to run Wiodows. That's right - no more virtual anything

A group of programmers had already demonstrated that running Windows natively on an Intel-based Mac was possible. But that was a clover back that no same IT shop would ever sumport in production. Boot Camp chape. es the equation, and it will be a part of the upcoming Mac OS X Version 10.5 code named Leonard

Does deploying dual-boot Macs raise total cost of ownership? Possibly, but I suspect that issue will be minimal. given that most organizations already support multiple versions of operating mutama Of course and TOO incomes would have to be offset by productivity boosts from those users given access to

both operating systems. The final reason for IT to look at Mac OS is the latest delay of Windows Vista. While the delay holds no earthshattering implications for IT, it does mean there's a window of opportunity to take a closer look at what else is out there now, ready to be put to use in

your organization I'm not suggesting that most businesses would be better served denlowing Mac OS over Windows. I'm not even supporting that Mac OS is right for some aspect of every business But these developments do dangle some low-hanging fruit that IT departments can exploit for positive results. In this case, that fruit just may be an Apple.

MICHAEL H. HUGOS

Factoring Complexity

OOD MORNING, my stalwart friends and Agility Corps recruits. As I promised last month when I insugurated this virtual group of IT practitioners, today I'm going to

talk about encounters with complexity. Complexity is that place where buge systems-development budgets disappear, leaving nothing behind but empty checkbooks, loose-leaf binders full of incoherent specifications, and half-

baked program code that crashes unexpectedly, b's the places on the man of a development project where orderly logic gives way to

great foggy spaces. All that is known about these spaces. is. "There he descons here" Many brave system developers have marched into them

and corten lost Developers' senses are overwhelmed by detail They are assailed by hard-tounderstand patterns. There is much hollering and handwaying as the business folks

describe all the things that could happen and all the things that must be guarded against. Many fine developers emerge from these places with slack jaws and glassy eyes. They babble about disjointed facts and are often on the verse of tears. They

have been devastated. Courage alone is not enough to survive an encounter with complex. ity. You need good technique, too, In the best of the moment, smart use of the six core techniques I have written about this past year is what separates brave winners from valiant losers. Your company turns to you, as a mem ber of the Asility Corps, when the eo-



you to find a way through those forcey spaces to build the agile systems it needs in order to reach its desti-

cut through the noise and find the simple patterns and components that make up complex situations? Before you answer that

mathematics deals with complexity. Do you remember trigonometry and those tests where you had to graph solution sets for bir. hairy quadratic equations? tions made your heart race and your blood pressure rise? And do you remember that ray of hope when you realized that you had been taught a

technique called factoring that lets you simplify these equations? For example, what if you are asked to calculate a and v values and plot the graph of this

 $[v^2]^2 + 2y^2(2x) + (2x)^2$ $2x + y^2$

nation. Are you ready? Now tell me, how do we apply simple techniques to

question, consider how Remember how those cous-

equation?

If you don't panic, if you keep your cool and apply factoring to the equa-

ine gets complex. It peeds

tion, it simplifies to become v2 + 2x = 0 Now you can easily calculate the a and v values

By direct analogy, there are two techniques to apply in complex business situations. First, use process muppine to identify high-level activities and break those activities into their component tasks. Then use data modolien to defen the standard and ume of the data handled by those tasks.

Presto, you just factored business complexity and revealed its simple underlying patterns. Now you can describe the processing logic and create a system prototype to deal with the situation. Congratulations - you earned your pay. Take the rest of the day off

Before we finish, though, I noticed that a few of you froze up when confronted with that equation. I also know that some of you panicked recently when confronted with a complex but ness situation. Calm down. Take a deep breath. Go back and review the core techniques and practice using them up til you feel confident that you can back it in the Acility Corps. And before you go - give me 50 push-ups.

WANT OUR OPHION? More columnsts and links to archives of previous columns are on our Web site:

Presper Eckert's Memory Was Faulty READ THE recent interview If became accepted that manyone interest f"The Eckert Tape

Computer Pinner Says FNMC Team Cruidn't Afford to Fail - and Didn't," Feb. 20], I knew Pres and his formily as well as several offiers involved in the ENIAC project. They were all bright hard-working and interesting people. My lather Iredell Eachus Jr., also worked or the ENIAC project as an engineer He and Pres and some others Clearwater, Fla. were classmates. Unfortunately my father died this past Decemb

However, we had some of his notes transcribed. My lather's account of the devel coment of a functioning electronic computing mechine is different from Presper's recollections as recently presented in your publication The interview presents Pres' view that no one else made any significant contribution to the effort. For those who were there,

else was evotematically unitten out of the history perticularly those who could endanger Presi quest for galents covering the basic currents of the machine, a fight that lasted over 25 years The lasture to secure the cotocal nationis is the ultimate statement that the machine was the result of meny minds and not a solo act David E. Enchus

HE ARTICLE did esplode THE ARTIFLE SOME ENUC IN INC. but it restort smaller that the ENMC was the "hist practical It is true that ENIAC holds the

title to being the first large-scale electronic computer, and perhaps even the first practical computer. But the first electronic diotal computer was invented at lowa State University by John V

Managed and Clifford Serv during the period from 1537 to 1942 at least love water print to ENIAC In fact ENIAC co.imon

tor John Mauchiny incomposated Atanasoff's design for an accumulator in the ENMC. Bob Farehore Assistant professor of computer science, Graceland

farnham@graceland.edu You Are Here™ THE DEVELOPMENT of

business applications for vehicular GPS will remain costly because of car and truck makers' proprietary in-vehicle systems YERS Repositions by Burnings Feb. 271 Much as it took the FPA to do what the NHTSA couldn't achieve with onboard diagnostic data standardization. It may take mandates from the FTC to pet manufacturers to conform to a vehicular data-bus standard.

Until vehicle owners can easily select or switch pervices by sonoly installing a telematics modern that is specific to a provider's wantess network don't expect widespread everyday use by the nublic in the meantime costly proprietary equipment is what ensures market share for those companies that can afford to com-

nets in sucha annications William Reimer Oakdale NV

COMPUTERWORLD welcomes commences from the resolvery. I william self be edited for howely and clarity They should be addressed to Jame Eckle, letters editor, Comouterworld, PO Box 9171, 1 Speen Street, Francoham Mace (1970) East (508) 879-4843 F-mad letterolit commitmental com lacture acaddress and phone number for immediate verification

For more letters on these and other topics, on to

IBM.



804, the 804 legs, Time and Express Medicures are registered trademarks of international Suspices



INFRASTRUCTURE LOG

_DAY 49: Things are out of control. Our system's just not secure, flexible or reliable enough. Gil bought some "infrostructure bloodbounds" online. He soys they can sniff out any problem.

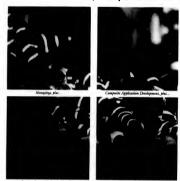
_DAY 50: Bloodhounds aren't as good at sniffing out network problems as they are at chewing Ethernet cables.

JMY 52: I've got it: IBM Tivoli Express middleware. It's a series of I.T. management solutions designed and priced for mid-sized businesses like us. It's secure, boosts uptime, and protects our data with automated backups. Our IBM Assiness Partner even customized and implemented it for us.

_Remind Gil: dog hair and computers, very bad combo.

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TECHNOLOGY

Full Service

Companies are looking to technologies that support many e-service channels and help agents move smoothly among channels to provide an integrated response to customers. PAGE 34



QUICKSTUDY Ultrawideband

Ultrawideband is a wireless communications technology that transmits large amounts of data over short distances using very low power. Learn all about it in this week's nrimer. PAGE 36



C.J. Kelly discovers that users are creating Access databases, which she realizes are yet another way for sensitive data to be compromised. PAGE 38



Reality and so the second seco

WHEN AUDITORS COME KNOCKING

at the door of Boise State University's IT department, executive director David O'Neill has a quick way of dealing with them. Rather than rounding up senior engineers to sit down with the auditors and spend hours answering questions about the university's IT.

questions about the university's IT systems, O'Neill instead relies on an automated application-mapping tool to quickly produce an up-to-date inventory and diagram of all the software systems

and the relationships among them.

The old approach of getting auditors what they needed could consume as much as three to five days of his senior engineers' time, says O'Neill. "Since most of these audit questions are really almost inventory questions, I

said, 'Let's have a machine answer those questions.' We don't need a bunch of my senior engineers doing it. That's too damned expensive," he explains.

of my sensor regiments sloring it. That it took dammed repeative. The explaination of the control of the contro

Boise State uses Packeteer Inc.'s PacketShaper to make network traffic visible, but it doesn't show what that traffic represents in terms of applications, locations and other specifics. The mapping tool gives O'Neill access to that intelligence.

The Need to Know Like O'Neill, IT managers at large cor-

portaines are increasingly concerned with tracking the continuous changes to their IT environments. They must be able to provide up-to-date information and their IT environments are systems to interestal and external auditors and quickty pinpoint problems in critical applications. And they cash plan for the future growth of the IT infrastructure unless they have full knowledge of the existing applications and their interdependencies.

Given that most large organizations are supporting dozens—nometimes hundreds—of applications across global networks, it's nearly impossible to keep a real-time record of the IT enterprise. That's why applicationdiscovery and -mapping technologies are gaining ground in corporate

Companies are finding that application-mapping software can provide critical information

and uncover surprises about what's running on their networks. By Sue Hildreth

Why App Mapping?

IT shows Unlike network auminoring tools or mapping tools that focus on finding hardware; application mapping is primarily concerned with software components and their relationships. though the tools may also include hardware information as it pertains to

an application

For instance, application mapping can be very useful for IT architects who want an occurate inventory and diagram of the IT infrastructure so Without a discovery capability, architects must manually input the information, which can result in errors as well as a static diagram that soon becomes outdated. Some architecture-modeline tools, such as those offered by Troux Technologies Inc. and Telelogic AB. are able to import architecture dura from other vendors' mapping tools. We're seeing alliances between

modeling tools and operational tools." says Gartner Inc. analyst Robert Handler. He notes that many organizations unwittingly have many redundant or just plain unnecessary applications. "As much as 30% of IT budgets are spent on the support of applications

that shouldn't have been approved in the first place." Handler says. Automated discovery and marring tools can help with application memitoring and configuration management tasks, he says. Increasingly, mapping

functions are being merced into larger product sets, such as system monitoring and management suites, or configurration management applications Quixtar Inc., an ordine retailer of beauty and nutrition products, bought Mercury Interactive Corn's Business. Availability Center to consolidate its numerous monitoring consoles and better diagnose problems with its Windows .Net- and IBM WebSobere-based infrastructure. The product includes

Mapping (MAM) tool.

diagnostic tools, a configuration managrement database, service-level management and the Mercury Application

Gree Robinson, Ouistar's senior stems support specialist, says he experienced only two problems during installation. One involved the installation of a MAM agent on an application contrada the financial The other shid lence was figuring out which types of data Quistar wanted to collect. "At first, information " Robinson says

The tool provides a way to create different views of the infrastructure and systems, depending on the role or need of the user, "We can slice and dice the view of the dashboard and ere ate different views with differing levels of complexity," says Steve Keselrine manager of IT infrastructure at Ada,

Mich-based Quixtar Mapping tools also help developers and operations staff to identify problematic changes to applications. Liberty Mutual Group Inc., a Boston-based global insurance company, began using Mercury's MAM product a year ago in order to get a better handle on configu-

ration changes. "A lot of developers have access to the production environment, and they may want to charge something they believe is basic, like a data file, so they don't bother to open a chappe ticket. Then the next time someone needs to make an authorized change, they have the wrone information about the configuration," says Stephen Wrenn, senior director of IT service management at Liberty Mutual, "In many companies, 50% to 60%

of outages are caused by changes." Wrenn's team has just started using MAM to run comparisons between chappe tickets and actual chappes to more than 40 applications. Prior to using a mapping total, he says, his curpany relied on manual diagrams based on staff knowledge of the systems.

Identifying Requirements Organizations often have multiple

needs for a mapping tool. Boise State University is expanding its use of nl aver software into two additional areas: menitoring application access and traffic over the network, and tracking suffreate license usage

ING Investment Management, an international banking and asset manattement company with U.S. headquarters in Atlanta, is leveraging mapping information for three key uses. The mapping data is used by the communy a IT architects, help desk support staff and operational IT staff to troubleshoot major systems, says Vincent Moriarty, assistant vice president of technolocy management. ING has a primarily Windows-based environment. It gathers software and hardware configuration data via Microsoft Corr.'s Systems Management Server (SMS) and feeds it via custom autumated interfaces into Infra Curp.'s help desk application and Telelogic's System Architect modeling tool. System Architect enhances the data from SMS using its own templates to add descriptive information on application and database relationships.

come Maniante "By getting information on the applications that we have, and on the relationships between them, we're able to understand how a new yendor packare might fit into that environment." he says. ING uses the mapping information with System Architect to model about two-dozen software initiatives annually, says Moriarty

At the help desk, having ellent configuration data on hand makes beloing users faster and less frustratine. "Without it, we would either need a large

The Agent Debate APPLICATION-MAPPING TOOLS CAN

work either as agent-based or agentic software, increesingly, products offer both options. Agentiess products do not install anything on other servers and clients and instead triv on politon or network traffic sniffing to locate application on Persy many collect data via ODRC Telest Secure Shell, Windows Manage Instrumentation, SNMP or FTE

Agent-based discovery looks, on the other hand, install agents on each serve to nather information and send undates to the magaing application. That can be problematic in large omensysticus if one unit doesn't want another unit's IT department to install the agents on its surveys But agents are capable of gathering more detailed data on an application and can send updates whenever there is a change

- not set when rolled by the server tment banking frm JPMcros Chase & Co. is using Symantee's Relicon product with agents specifically for its real-time capabilities. The apendiess on we've seen all do notion at desirouted times. We need to know night away if there is a change," says Kurt Hansel, assistant was president for quality assurance infra-

structure at JPMorgan. Gertner analyst Ronal Colville exp Some people are alraid of security issues with agents. And data center folios are alraid of overutilization. But at the end of the day, if you want to understand in-depth changes with an application or on a server you need an agent.

- SHE HE OPETH

manual effort to collect that information in advance, or the belt desk technician would have to ask a lot of questions each time a user calls," says Moriarty. The mapping data also helps ING

pinpoint problems with its servers. For example, the company recently identefied the cause of the failure of a scheduling agent on a server at its Hartford. tently configured to act as a forwarding agent for data flowing between the Atlants and Detwer offices and was oven whelmed with traffic. Without autodiscovery and mapping, much greater effort would have been needed to solve the problem, says Moriarty.

*Before, we would have to put network monitoring equipment on the data lines in and out of our data centers and track the transmissions at a very fine level of detail to identify where they're coming from, the nature of the transmissions and the volumes," he

says. "This is just more efficient" Application-mapping tools have similar purposes, but they differ in how they detect applications. Another differentiator is how many common commercial applications, such as Ocacle Financials or Microsoft Exchange, they can map quickly via templates or blueprints of the applications' main

"The real differentiator is how well they pick up application stuff, and that's a factor of how many blueprines they have," says Gartner analyst Runni Cabilla

They also differ in whether they use agents to collect information or use asent less technologies (see story at left). While demand for mapping tools will no doubt grow, Colville expects standalone products to disappear by 2008 as they are merged into other products such as application monitoring, IT asmanagement suites. She notes that there has been a series of recent ac-

quisitions of mapping vendors. For example, IBM bourht Collation, Mercury, acquired Applied Inc. and Symantec Corp. purchased Relicory Inc. "They're all getting gobbled up, Colville says. Nevertheless, she adds, "it's still a good value, and I think ellents should buy it. A lot of data centers have no idea what's there. . . . They're not ready for compliance initiatives. These tools, because they can discover

in mostly real time what's out there. offer a really big advantage." Hildreth is a freelance IT writer based in

Waltham, Mass. She can be reached at Sue.Hildreth@comeast.net.



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The Agent Debate

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structure at J*Hongan.
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effort would have been needed to solve the problem, asys Moriarry.

"Before, we would have to put network monitoring equipment on the data lines in and out of our data centers and track the transmissions at a very fine level of detail to identify where they're coming from, the nature of the transmissions and the youlmest." In

nne level of detail to identify where they're coming from, the nature of the transmissions and the volumes," he says. "This is just more efficient." Application-mapping tools have similar nursouses but they differ in

similar purposes, but they differ in how they detect applications. Another differentiator is how many common commercial applications, such as Oracle Financials or Microsoft Exchange, they can map quickly via templates or blueprints of the applications' main

components.
"The real differentiator is how well
they pick up application stuff, and
that's a factor of how many bluepriots
they have "save Gartner analyst Ropol

that is a factor of now many butterpricts
they have," says Gartner analyst Ronoi
Colville.
They also differ in whether they use
agents to collect information or use
agentiess technologies (see story at left).

While demand for mapping tools will no doubt grow. Colville expect as wall-alone products to disappear by 2008 as they are merged into other products such as application to missing. It asset management and configuration management suites. She notes that there has been as series of recent acquisitions of mapping wedors. For exquisitions of mapping wedors. For example, IBM bought Collation, Mercury acquired Applieg Inc. and Symantee. Corp. purchased Relicore Inc.

"They've all perting gobbled up," Colville usy, Nevertheless, she adde, "it's still a good value, and I think clinets should buy it. A tot of data centers have no idea what's there. ... They're not ready for compliance initiatives. These tools, because they can discover in mostly real time what's out there, offer a really big advantage,"

Hildreth is o freelance IT writer based in Waltham, Mass. She can be reached ot Sue Hildreth@comcast.net. Sterling Commerce leads the world in helping businesses collaborate with their partners.

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_INFRASTRUCTURE LOG

_DAY 8: I give up. Our infrastructure is sa inflexible Our apps and pracesses dan't work together. We can't respond quickly to change. It's out of control

_Gil had an epiphony. Duct tape. A few dozen rolls later and he's integrated everything, and everyone, by hand,

_DAY 10: Duct tope can fix many things. Basketballs. Safas, Doorknobs, But not widespread app and process inflexibility.

_DAY 13: I've found something better: TRM WebSobere middleware. It'll make our infrastructure mare flexible by seamlessly integrating our apps. We can change processes in a snap and use what we already haveeven apps from SAP and Oracle. And with IBM's industryspecific expertise, we're on our way to enabling a service-griented architecture

Download our IBM SOA assessment tool at: WebSphere

IBM.COM/TAKEBACKCONTROL/SOA



RICHINE COM
Inc., the online
travel service, has
bet as besiness
model on the fact
that Web-savey
customers like to
help themselves
— in this case, to
deads on airfare,
hotels, car rentals and the like. The

botels, car rentals and the like. The Norwalk, Corn -based company has extended that model to its customer service operations, adopting an e-service strategy to complement its telephonebased call center. If customers run into trouble during a travel search, they're encouraged to try self-service or e-mail options — more cost-effective ways to handle services issues — before resorting to a phone call.

Like Priceline.com, companies everywhere are leveraging e-service technologies - Web self-service, chat. c-mail response management collaboration tools remote diagnostics - as an alternative to the phone for interacting with customers. One reason is that customers today want the additional channel octions that e-service offers them. According to a 2005 survey from Wellesley, Mass-based Service Excellence Research Group LLC (ServiceXRG). 60% of high-tech customers stremet to solve their own problems through self-service knowledge bases before trying interactive channels.

vice technologies for some time, and cost reduction has been the primary driver. Conventional wisdom says you can push customers from the phone to lower-cost channels and watch services delivery expenses drop. However, companies are finding that customer service doesn't conform to such a simple paradigm. To be effective, e-service deployments require considerable investments of time and money - in knowledgebase creation and maintenance, sombisticated search technologies, incident tracking and workflow tools, and channel integration - so customers get the same experience regardless of how they contact providers. So although the cost benefits that can result from e-service initiatives have not declined, businesses are increasingly looking at other reasons to justify investments.

In a recent survey conducted by Service XCR, 90.4% of respondents said et chat, customer satisfaction is the leading services such as remote control, chat and collaboration, while 94.4% in named customer satisfaction as the primary driver for self-

service.
"Four or five yeas ago, call deflection was the primary driver (for our eservice initiatives), but now we're looking at what
additional value we can
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services at Espoo, Finlandbased Nokin Corp. Nokia
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Some vertical industries
have been eleveragine estemhave been eleveragine estemhave been eleveragine estem-





liacnt search and knowledge base

Large companies making e-consider part of their CRM and other customerfacing initiatives have seen solid returns and customer adoption, but they continue to face significant technology and process challenges, according to John Raesdale, an analyst at Forrester Research Inc. Those challenges include the need to provide agents with a single view into customer interactions ensure that customer data is consistent across channels, integrate support channels so customers can easily move from one to another, and streamline processes so contacts can be easily escalated along with their associated

Multichannel integration challenges have been eased by application suites built on systems that provide a common knowledge base, queuing and routing capabilities, and a unified view into customer interactions, possediors of which channel they come from These suites are available from e-service vendors such as Kana Software Inc. and eGain Communications Corp., as well as enterprise application vendors such as Oracle Corn., says Ragsdale, Meanwhile, switch platform vendors, such as Genesys Telecommunications Laboratories Inc., are offering e-mail response, Web collaboration and other e-service tools as part of their infrastructures. Users still face the task of integrating customer-facing databases with frontand back-office databases that inform customer transactions, such as finan cials and order fulfillment

To enable knowledge-base queries and create FAQs, Princeline recently deploy Kana Customer 10, 249x CIO Ron Rose. That product, along with Kana Response, an e-mail management system deployed in 1999, and Kana's call management application, make up Pricelina Customer Assistance Resolution and Esculation System, or CARES. The system is designed to deliver consistent information whether the customer searches FAQs, sends an e-mail or places a call. It replaces a homegrown call management application and provides a unified view into customer data, as well as into main-

frame systems related to its supply chain. "Handling c-mail workflow is fam-damental to anyone whose business relices on the Web — and there days, that's just about everyone," says Rose, Yet a new study from lupic/recearch says not enough componies do sor. According to the residenth of the property of all Web sites offered e-mail for customer amonor in 2005, but inst 48th successions.

90.4%

83.8%

Z4.3%

60.69

40.3%

47%

earches mated response to acknowledge receipt ca call. It an agement took three days or more to respond to e-mail or didn't respond at all Rose says the new IQ module frees

sone says the new M, mouter frees agents to deal with more complex problems. And its business-oriented authority took fire IT from having to develop content for Priceline's FAQS: product management seams can do it instead. Priceline opeed to deploy modules individually rather than choses one monodithic system. "If we were a greenfield company, we might have pone with a system with tighter integration, but we needed flexibility."

monolithis system. "If we were a greenfield company, we might have gone with a system with tighter integration, but we needed flexibility." Rose says. The biggest integration challenges involve bringing legacy mainframe financials and supply chain systems together with the contact centers usine. Be a supply that in the contact centers usine he said.

A Video Game Winner

An e-service initiative has delivered solid returns on investment for France-based video game producer Ubisoft Entertainment SA, says Brent Wilkinson, senior manager of North American support. Ubisoft chose a hosted service suite from Brenman, Monti-based RighthNow Technologies Inc. and integrated it with its online customer databases. When people use the Ubisoft databases. When people use the Ubisoft databases.

FAQ or escalate to an e-mail, the incident history is captured by Righthow. According to Wilkinson, Urbisoft has been able to drive 98% of its support vulume to its FAQs, and even if a customer decides to use. Web mail, the system looks at keywords and makes another attempt as suggesting fixes. The system enables the company's North American support team to run just a small call center in Ralegh, N.C., where hold

times have been reduced from two to three minutes to under one minute. Another significant outcome of the Right Now deployment, says Wilkinson, has been the standardization of Ubisoft's worldwide support teams — based in the U.S. Canada, France, Germany, England, the Netherlands, Italy, Spain and Scandinavia — on one system

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and related assets for municipalities serous the U.S. a soff-service potents into take the soft service that the soft service that the company's shalling to compete, says IT manager David Al-Khazraji, The Perry, G.a.-based model, the Business Suite in a hosted model, though it must be Oracle Portal front end in house. Customers use the portal, which were this in early 2005, to ebeck billing information, log and track field.

al from a documents-haring reprisincy. Though the implementation of the state of products — which also includes financials, manufacturing resource planning and service-delivery applications — and the associated legacy-data imparation was difficult. Al-khazzai says the effort has paid off.

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Customer surveys reveal a service satisfaction rate of 92% for 2006. Moreover, complaints about service have dropped 40% over the past two years, according to Al-Kharraii.

"Our portal has greatly enhanced our ability to compete, especially in getting large contracts." In 2009, "Our customers can manage their interactions with us and see what our customer service reps see. We recently closed one of the beggest deals in our history because of the transparency we are able to provide in through our portal." It

Gilhooty is a freelance writer in Falmouth, Maine. You can reach her at kynysii maine recom.



The complexities that accompany quality e-service delivery through many channels – and the risk of losing customers through poorly planned implementations – have companies thinking more strategically about

RCELINE COM fnc., the online travel service, has bet its business model on the fact that Web-sarvy customers like to help themselves — in this case, to deals on airfal.

hotels, car restals and the like. The Norwalk, Come hased company has extended that model to its customer service operations, adopting an e-service strategy to complement its stephone-based call center. If customers run into trouble durling a travel search, they're encouraged to try self-service or e-mail options — more cost-effective ways to handle services issues — before resour-bandle services issues — before resour-

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In a recent survey conducted by Service vice/RG, 90.4% of respondents said customer satisfaction in the leading driver for implementing services such as remote CHALLENGES control, chat and collabora-

SVIGE
Services such as remote control, chat and collaboration, while 94.4% named customer satisfaction as the primary driver for selfservice

"Four or five yeas ago, call deflection was the primary driver [for our e-service initiatives,] to looking at what additional value we can bring," says Paul Esch, director of global support services at Espoo, Finiand-based Nokis, Corp. Nokia has invested considerably in its third-party e-service portal and underlyine ined-



ligent search and knowledge base. Large companies making e-service part of their CRM and other customerfacing initiatives have seen solid returns and customer adoption, but they continue to face significant technology and process challenges, according to John Raesdale, an analyst at Forrester Research Inc. Those challenges include the need to provide agents with a single view into customer interactions. ensure that customer data is consistent across channels, integrate support channels so customers can easily move from one to another, and streamline processes so contacts can be easily escalated along with their associated

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mation whether the customer searches FAOs, sends an e-mail or places a call. It reviaces a homegrown call manager application and provides a unified view into customer data, as well as into main

frame systems related to its supply chain. "Handling comeil work flow is fundamental to anyone whose business relies on the Web - and these days that's just about everyone," says Rose, Yet a new study from luniterResearch says not enough companies do so: According to the research, 92% of all

Web sites offered e-mail for customer support in 2005, but just 41% used auto-

90.4% 83.8°° 74.3°0 46.300 27.9°° mated response to acknowledge receipt of requests. Nearly 40% of companies took three days or more to respond to e-mail or didn't respond at all. Rose says the new IO module frees

agents to deal with more complex problems. And its business-oriented authoring tools free IT from having to develop content for Priceline's FAOs: product management teams can do it instead. Priceline opted to deploy modules individually rather than choose one monolithic system. "If we were a greenfield company, we might have rone with a system with ticheer integration, but we needed flexibility."

Rose says. The biggest integration challenges involve bringing legacy mainframe financials and supply chain systems together with the contact center suite, he says,

A Video Game Winner

An e-service initiative has delivered solid returns on investment for Francebased video game producer Ubisoft Entertainment SA, says Brent Wilkinson, senior manager of North American support. Ubisoft chose a hosted service suite from Bozeman, Mont.based RightNow Technologies Inc. and integrated it with its online customer database. When people use the Ubisoft FAQ or escalate to an e-mail, the inci-

dent history is captured by RightNow. According to Wilkinson, Uhisoft has been able to drive 95% of its support volume to its FAOs, and even if a customer decides to use Web mail, the system looks at keywords and makes another attempt at supposting fixes. The system enables the company's North American support team to run just a small call center in Raleigh, N.C., where hold times have been reduced from two to three minutes to under one minute.

Another significant outcome of the RightNow deployment, says Wilkinson, has been the standardization of Ubisoft's worldwide support teams - based in the U.S., Canada, France, Germany, England, the Netherlands, Italy, Spain and Scandinavia — on one system Previously, when a Germany-based customer, for example, came to the

North American site, customer service representatives would send an e-mail to the German team. They would then hope it got answered; if it dido't, they'd have to follow up themselves. Now the system automatically routes requests based on IP addresses or the country of origin tied to the account, sending the user to the appropriate support center. At Utility Service Co., whose primary business is maintaining water tanks and related assets for municipalities across the U.S., a self-service portal initiative has significantly improved the company's ability to compete, says IT manager David Al-Khayraii The Perry, Ga.-based firm is using Oracle's E-Business Suite in a hosted model though it runs the Oracle Portal front end in-house. Customers use the nortal which went live in early 2005 to chack

billing information, log and track fieldservice requests, and download material from a document-sharing repository. Though the implementation of the suite of products - which also includes financials, manufacturing resource planning and service-delivery applications - and the associated legacy-data migration was difficult. Al-Khazraji says the effort has paid off.

"It's such a complex architecture that our legacy data wasn't even enough to create a single record in Oracle. We initially had to create a lot of default values to pass to Oracle and work on them afterward," Al-Khazraii says, But Oracle has allowed Utility Service to tie all of a customer's interactions with the company to a single customer ID and eliminated manual indexing Someone just types in a customer ID. and it's already indexed 90 different

Customer surveys neveal a service satisfaction rate of 92% for 2006. Moreover. complaints about service have dropped 40% over the past two years, according to Al-Khazraii

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Gilhooly is a freelance writer in Falmouth, Maine, You can reach her at kynng@maine.rr.com.

THERE'S CERTAINLY BO here scentaines when communications and networking technologies With all the currently available forms of wireless socess ~ cell phones, 3G, Wi-Fi, WiMax, Bluetooth, power lines, and 802.11a, b, g and n - you wouldn't think there's room for anything more. But technology murcher forward and in the next couple of years, we're going to be seeing a new

and different wireless technology The new kid on the radio block is ultrawideband, also known as UWB or digital pulse wireless. It will help deliver television programs movies, games and multimegabyte data files throughout our wireless homes and offices UWB is faster than current wireless LAN technologies and provides a short-range, highbandwidth pipe that eliminates

Origins of UWB Gerald F. Ross first demonstrated the feasibility of UWB waveforms for radar and communications applications in the late 1960s and early 1970s Originally developed by the Defense Advanced Research Projects Agency, the technology was called baseband. carrier-free, impulse communications or time-domain signaling, until the U.S. Department of Defense named it

ultrawideband in 1989. In some respects, LIWR technology goes back to the dawn of radio and Gurdielmo Marconi's early spark-gap transmissions. UWB is also a successor to spread-spectrum radio (also called frequency-hopping), a World War II technology than splits a broadcast across many different radio frequencies.

DEFINITION

ULTRAWIDEBAND is a wireless communications technology that transmits large amounts of data over a short distance using very low power. UWB sends very precisely timed short-duration digital pulses across a number of

frequency channels simultaneously.

using one at a time to avoid jamming. (Curiously enough spread spectrum was invented - and retented - in 1942 by actress Hedy Lamor and composer George Antheil) In contrast, UWB uses every frequency available to it. all at the same time. UWB isn't a direct substitute for any other form of window

some things that no other technology can match. A UWB transmitter sends billions of short-duration pulses across a wide spectrum of radio frequencies. These RF bursts come so fast - lasting only from a few trillionths of a second to a few nanoseconds -- that each actually uses only a few cycles of an RF carrier wave. This short duration gives

properties. They are relatively immune to multipath cancellation effects, such as when a strong reflected wave arrives out of phase with the direct path signal, reducing the signal strength in the receiver. UWB pulses are so short that the direct signal has come and gone before the reflected path arrives, so no cancellation takes place. Because UWB waveforms some unique

UWB pulses are so short, they

spectra; this allows signals to use very low power, which minimizes interference with and from other radio freezen. cies, reduces health buzards and often falls below the normal noise floor, thus making it handes to detect Technically, UWB is defined

as any radio technology whose spectrum occupies more than 20% of the center frequency. or a bandwidth of at least 500 MHz. Modern UWB systems use various modulation techniques, including Orthogonal Frequency Division Multiplexing, to occurs these extremely wide bandwidths In 2002, the Federal Com-

munications Commission approved the commercial use of LIWR transmissions in the range from 3.1 GHz to 10.6 GHz. at a limited transmission power. UWB systems can, in principle, be designed to use nearly any part of the RF spectrum

UWB, Bluetooth and IEEE 802,15.3 Applications

ULTRAWIDEBAND will not replace Bluelooth UWB's Role in for short-range communications, because

Blustooth is a complete, end-to-end commurecations standard, whereas EWR is merely a radio technology that can be used as part of an overall standard. Bluetooth defines how data is managed, formatted and obscically carried over a wentest personal area network (WPAN) However, designers expect that future Bluetooth implementations will be built on top of

UWB signels. 802 IS 3 is the IEEE standard for a high-data rate WPAN designed to provide sufficient quality of service for the real-time distribution of content such as wideo and music. It is ideally suited for a home multimedia wroless network. The original nded uses a traditional carrier-based 2.4-filis radio as the physical transmission layer.

802.15.3a, a follow on standard still in the formative stages, will define an attenuative place cal lawn. Current proposals based on UWB will provide more than DOMblifter, at a distance of 10 meters and 480Matter, at 2 meters. This will allow the streaming of high-defection video between media servers and high-definition m tors, as well as the extremely last transfer of files between tensors and portable deserve

Wireless Convergence



In its current state of develop ment, UWB is aimed at high data rates for personal-area networks, which have an effective operating radius of approximately 10 meters or less. Though similar to the current canabilities of Bluetooth (see story at left), it uses a very different technology. UWB transmissions trade distance for bandwidth, so the greater the range, the lower the final data rate. Range can be extended up to perhaps a kilometer by using high-gain antennas and reducing performance. One of UWB's defining char-

acteristics is that it requires very little electrical power one source says it uses 0.00% as much power as a cell phone - and thus is virtually undetectable by conventional radio which see the UWB signal as just very quiet background noise. Thus, a UWB telephone would use so little power that it could remain on for weeks without needing to be recharged. And because it uses all available spectra, UWB may well be cheaper to design and manufacture than conventional radios that require careful tun-

ing to a specific frequency. A UWB transmitter and receiver must be closely coordinated and synchronized to send and receive pulses with an accuracy of trillionths of a second. The receiver responds only to a familiar pulse sequence. This makes UWB were secure, which explains why is was once used for clandestine communications by military and espionage agencies, UWB's broad frequency range includes the ultralow frequencies the U.S. Navy uses to communicate

with submerged submarines. UWB products will include radar and electronic location and positioning devices in addition to radios. UWB radar can see right through walls, ceilings and floors that would block or reflect other types of radio signals. As an electronic

To Learn More

measuring technology, UWB is more accurate than Global Positioning System satellites and it can be used indoors. The Navy reportedly plans to put UWB markers on almost evcrything it ships overseas, just

to track materiel and keep it from being stolen. Furnitually LIWB networks are expected to run at speeds handle all of the phone, televi-

sion, and Internet traffic for a home or small business. Kay is a Computerworld conun to a gigabit per second and tributing writer in Worcester. therefore should be able to Mass. You can contact him at

russkay@charter.net

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Securing Data When Data Is Everywhere

When our security manager realizes users are creating Access databases, she sees a new way to compromise data. By C.J. Kelly

down to it a security manager's iob is about nontection information sense. But no matter what kind of business you're in if you can't find all the data, you can't protect it. Users out data where they need it and they don't think

about who has to know what they're up to in orday to protect the SECURITY data. The problem for security staffs is MANAGERS identifying where all the data is and make ing sure the proper controls are in place

to protect the information We recently discovered that agency personnel often create Microsoft Account detabases to help them manipulate data and create reports. The users who originate such databases. or the heads of their departments, may be deemed the owners of the data but IT remains its custodian. Unfortunately, many data owners don't understand the concept of security controls, or even the need for them. It becomes the responsibility of IT security to implement the necessary

Ideally, IT security would understand how people work what they need and what they are trying to accomplish. Then we could get in front of am effort to manipulate data to make sure that something like an Access database has the proper security controls in place. That's not usually how thines eo. Generally, data is saved in various formats and then e-mailed, transferred. shared and printed. Afterward. the original data has mornhed

and has numerous owners and The realization that meets were putting data that could be considered sensitive in Accers databases meant I had some homework to do. I have

very little understanding of how to secure an Access data. base, but whenever data that is considered electronic protected health information under the federal Health Insurance Portabili ity and Accountability Act is involved. I

have to make ourse it is well protected. I asked the IT person who provides Access database support how such files --secured. At first I got a blank stare but then he seepended

"We rely on file system permissions, basically," That made sense. Access output is treated like output from any other Microsoft Office program, such as Word or Excel But I needed

Microsoft's Web site didn't give me a lot of answers, so I ended up checking the help menu from my copy of Access. I learned that there are some strategies for securing Access, but none of them is very good. Here are the rechniques I found out about

is the simplest method, but

from being opened by a tool or utility it doesn't recognize, like a word processor. It doesn't prevent anyone from

opening an unsecured datahase using Access Show or hide objects in the database window This is incr emoke-and-mirrors tactic and can easily be circumvented.

Start-up options: The database creator can specify a start-up form that opens automatically when the database opens.

Again, it's smoke and mirrors Passageds: You can get up a password to the database, but only one. You wouldn't be able to open the database without the password, but you would have to give everyone who needs to access the database the same password. That's not a good practice. And if you replicate databases, as users

do in my agency, you can't configure it for a passwordupon-open option. User-level security: This is slightly more secure than the

above methods. The database creator or administrator can specify how much access each user has to tables, queries. forms, reports and macros Information on a user's access level is stored in a file called

workgroup information Preventing users from reolica the database, setting passwords level security must be in place for this to work, but it would mean that only administrators would have the necessary per-

missions to change settings. This might be one change we can make, but it isn't enough. Securion Microsoft Visual Basic for Applications code: You can copy your code into an Access

MDE file and then passwordprotect is. This applies to data that is accessed via a Web page. The

Weh pages are stored in the SECURITY LOG file system, so only file system

security applies In my view, these security measures are inadequate for protecting personal health Information. Our responsibilities under HIPAA are one reason we outcoursed our major information systems. But, with data everywhere, the problem har come home to most So, what is my strategy? Tell

program staffers that they can't create Access databased Not going there

I have requested a list of all Access databases agency wide I want to know who the owner of each database is, who the nsers are, what the purpose of each database is and whether it contains electronic protected health information. Once we know where all these little databases are, we are going to institute user-level security for

all of them and apply networkand file-level permissions based on the sensitivity of each database. I also want to require that anyone extracting data from the primary information system into a local file system or database must per sign-off from IT security and his department head. At the same time, we'll have

to re-educate staffers so they understand why we are doing this. We have trained our employees on HIPAA privacy, but they don't really understand the security aspects. As I said. convenience trumos security needs in their eyes, and they are used to having information available to them on the net-

work and having the ability to copy, change, move and e-mail it - all the things that keep a security manager awake at nieht

I can't think of any other way of doing this 1'd certainly like to hear your ideas.

WHAT DO YOU THINK!

valvos cora, or pin the discussions in our



BRIEF

Iona Updates its ESB II nos Technologies Inc. has relaxed the latest version of its orderyriss service but. Artis 4.0 includes IPE1 Land crothestration to allow users to coordinate interactions services a destributed act of services in a beteroperious review of the coordinate interactions control and the coordinate interactions. In a detition, Artis 4.0 alpha without participate and attacks.

dard messaging API. It is available now for \$10,000 per CPU, with additional play its starting at \$2,500 per CPU.

Silber Uncornaries

Steam uppraces

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CURT A. MONASH

Six Things I Think I Think About UIs

OFTWARE without a good user interface is—well, its useless. Unfortunately, UIs aren't nearly as well understood as more objective speeds and feeds' kinds of product characteristics. Products with nazezy demos often prove

it" vagueness. But difficulty nowithstanding, UIs are too important not to write about. And so, to steal a line from sportswriter Peter King, here are six things I think I think about UIs.

think about UIs.

1. A good graphical user interface is the most important feature a product can here. In many cases, the GUI is the feature set, whether we're talking about operational applications, business intelligence or IT adminis-

tration tools. For example, the general user analytics market is dominated by friendly BI tools. More powerful products exist, but they're mainly used by specialists, since everybody else is turned off by their clunky GUIs or command-line interfaces.

Equally dramatic is the importance of GUIs in IT administration. Check Point Software Technologies rose to dominate the firestall market because it offered a usable administrative GUI back when other products operated from command lines. Similar phenomena occurred in database administration and many offer nectors—it would be a many offer nectors—it would wise in more sectors if wonders would wise in more sectors if you the product with the product of the product would be a support to the product of the product would be a support to the product of the product with the product of the

2. Web Us are now, healty, such superior to the client/server systems they replaced. Usually, changes in computing platforms lead to improved user interfaces. More powerful mainframes and cheap-



er minicomputers allowed real-time apps to replace batch systems in the 1980s. Client/server GUIs blew out character-based apps in the 1990s. For years, Web technology was a partial exception, since it actually caused a retreat in GUI flexibility. But the group of technologies collectively labeled AIAX has

finally restored client-side

parity — or, if you like multimedia, even forged ahead — and Web apps now boast toptier GUI functionality. What's more, they have major application navigation advantages, via hyperlinking and

search, over anything that came before 3. Bl look and feel is on the uppwing. Onc. UI area that stagnated for years was BI. Not only was it hit by the transition from client/server to the Web, but vendors also spent years upgrading their server-side infrastructures. Now however, we're beginning to see UI advances again. Some of them are subtle, such as the care being taken to optimize the use of screen real estate. Others are flashy, such as the long-overdue mainstreaming of some cool datavisualization technologies. Either way, UI is once again an important decision factor in selecting a BI vendor.

4. Partal technology is headed for a boom "Portat" might seem like a somewhat passé Internet bubble buzzword, but portal technology is acmally very important in at least three ways. First, it's increasingly central to application navigability. Second, it's an increasingly important BI underpinning (both SAP's and Oracle's analytics are portaldependent). Third, it provides the integration framework to combine operational apps, analytics and collaboration technology in new ways.

technology in new ways.

5. Mean's bingue interface, by the circular control of the control of t

where notwithstanding.

8. Microsoft Office is a huge question

mark. Microsoft Office is at a crossroads, with a mounting open-source challenge and a justified reputation for unpopular feature bloat. Microsoft's main strategy to reverse this trend is to make Office the gateway to database information, rather than just to static documents. Much of the action falls in two areas = PB and live XMI.

The first fizzled query-in-Excel effort dates back to about 1993, but there's reason to think it will be different this time. The BI industry is making Excel ever more viable as a core analytics client by delivering reports straight into formula-rich Excel spreadsheets, for example. Or maybe not; after all, those same vendors are trying to undermine Excel by replacing it with more heavy weight budgeting/planning systems. And, as I've noted before, live XML is a great idea in certain niches, such as smart forms or complex contracts, but whether it will ever go mainstream remains to be seen. Interestingly, as we went to press, Microsoft announced that it plans to acquire BI vendor ProClarity.

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INTEROP

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MANAGEMENT

Community Colleges Get Real In response to input from business advisers, some community colleges are working bard to keep their IT curricula up to date and enhancing internabily opportunities for students. PAGE 50



The Real Value in Sarbanes-Oxley Companies are finding unexpected value in Sarbanes-Oxley compliance efforts. Harvard Business Review authors Stephen Wagner (far left) and Lee Dittmar explain how. PABE 48

The Pervasive Potholes
Of Charge-out
Bart Perkins offers advice on how to avoid
eight potential potholes that can make
your route to an effective chargeback
system unancessarily home. PAME 58

MOINION

Start with and heavy client immersion, toss in worldwide, cross-cultural teams and seat-of-the-pants amid crushing time and budget constraints, and you've got ...

Project Manager

BY MARY BRANDEL

EING a project manager today is a lot different from playing that roe a few years ago, just sak Brenda Dunn, a project manager/business analyst at Long & Foster Real Estate Inc. in Fairfax, Va. She receasily headed up a project to build a critical relocation system for the privately owned realty firm.

valety owned reasty brm.

For several hours each day over a period of more than six moonts, Dann worked innessively with users from five different departments to hash out exactly different departments to hash out exactly different departments to hash out exactly different departments to hash out exceeding the sevent department of the workflow, the drop-flow memors, the names of fields it everything; the says, Part of Dunn't job was to corral all of the user's opinions and needs it no a single, unified system and help them visualize what it would look like.

Once the requirements and screen prototypes were solidified, Dunn sent them to 12 offshore programmers in India whom she had previously met to tutor in the ways of the U.S. real estate business. Then she coordinated communication hetween the users and programmers, remaining mindful of the cultural and time-zone differences. Cross-cultural teaming and heavy

business immersion are just some of the new challenges that project managers like Dunn sow face. Increasingly, project teams and key decision-makers are dispersed throughout the words, time frames for completion are compessed because of brightened competition, and the projects themselves are not well defined yet are tied ever more tightly to business success.

This means big changes for project managers. "The perspective, the knowledge base, the skill set and the methods traditionally employed by the project manager must change to accommodate the demands of project management in Continued on page 46



IBM.





INFRASTRUCTURE LOG

_DAY 19: The business is, uh, coming apart. I.T. isn't in sync with the suits. No one's sure what they need to do. It's totally out of control. Con things get any worse?

_DAY 20: It got worse. Gil fell into the crack. Maintenance needed a GPS device and a hundred feet of rope to rescue him.

JMV 24: I've found a may to take book control: IBM Roticolal. Now make no paletform that lets us govern the matter software development and stage is with our business goals. Everyone know that it stages to the company of the company of teams and manure our software's in compliance. I'll even help implement a service-oriented architecture which will note us make stages. Our super some control make us man extension of service or service which will note us more flashible. Com you say win-win?

_Everyone's glad the crock is gone. Gil says his nightmares about "the dark place" one practically over.

Get our white paper on governing development at:
IBM.COM/TAKEBACKCONTROL/GOVERN

FIND THE

ERHAPS THE MOST IMPORTANT and ficult task for project managers today is one that has always been a challenge: finding a way to gain more influence over the name you're leading but ultimately

don't have authority over. "It's an ongoing problem," says Peter Baker, was president of information sys-tems and technology at Erecor Facilities names. Tim a firm believer that the next ect manager needs the authority to make decisions without going to higher-ups

once the project has been authorized.

But that doesn't always become. In fact, in the west majority of cases, project nagers don't even report progress acity to the project spansar but work rough an intermediary, says Gopal spur, president of the Center for Project gement. The problem has become re acute with globalization, "Customers can be worthwide, in different time zones d speaking different languages," says pur. Project managers are the key to ging all that and so need much more

rity then they're ever given." One polution is to establish a climit line to the CIO to intervene when things g awry, but that's not particularly clive, says Kapur. "Having authority is wing I. When my customers don't

too to me. I'll call my hoes." he nt's more radical is for the CIO or the sponsor to demonstrably hand over the rains to the project manager by clarify ing his authority in the project charter and amoing it at the lockoff meeting. Then If high-level statesholders are constantly ing late for project meetings, for reple, the project manager can take me, lock the door and effectively se" the meeting live mirutes after start time, he says. That will get their attentio

- MARY ROANDES



Continued from page 43 2006," says Bryan Beverly, a software architect and team leader at BAE Systems Information Technology, a government IT contractor in McLean Va

Broaden Your View A key change Bassely eyes is that

the perspective of project managers has become as decentralized as the technology they manage, "You need to look beyond your immediate circle and appropriate the dynamics of a breader community of interest and practice." be says. That includes understanding the business goals and pressures that motivate both your project sponsor

and your meer When you're dealing with a Stanford MBA who's bright and aggressive, if you're not on too of your game discussing project scope and budget changes. you're toast," says Virginia Robbins. chief operating officer at North Bay Bancorn, a community bank holds ing company in Napa, Calif. "Project

managers today have to be absolutely confident that they understand both the technology and the business and can translate between the two " adds Robbins, a Computerworld columnist who spent years as an IT project manager. To achieve that confidence, ask ques-

tions relentlessly until you understand precisely the terminology, the issues and the context within which the business users operate, she says.

Communicate in 3-D Because the people you're working with and want to learn from are no longer always right down the ball - or even on the same continent - project managers have to become great communicators. "The virtualization of IT makes it tougher to communicate. says Peter Baker, vice president of information systems and technology at Emeor Facilities Services Inc., a subsidlary of Emcor Group Inc. in Arlington. Va. As a result, he says, project managers "need to communicate up, down, to

the left and right." That means using tools and adopting ractices that support collaboration. Those practices might include storing all documentation in one virtual place where everyone on the team, no matter what his prographic location, can access them. But it also means understanding the importance of old-fashioned, face-

to-face meetings. "You can't rely on tools to make up for a geographic situation," warns Bill Hagerup, senior instructor at Quellette & Associates, an IT professional develcoment firm in Bedford N.H. Owercoming cultural gaps means meeting in person with your team members and bear stakeholders at least once and as early in the project as possible he was

Become Worldly-wise

With companies globalizing their business reach, it's important to stay on ton of the customs and cultures of other nations. But you also should know about the worldwide economy, U.S. nolicies toward countries in which you do business, differences among the IT standards supported by different countries and whether your technology can interact with those standards. Beverly

USERS

when the address label talk off'

says. "If you're playing outside the U.S., you have to be aware of the U.S. position toward the partners you're doing business with," he says. Being aware of global politics can

also enhance relationships with oversens team members, "Technology people might think internstional politics never come into play, but there are a lot of things underlying people's loyalties and beliefs that must be understood and managed," says Gonal Kanur, president of the Center for Project Management in San Ramon, Calif, "It's the rare project manager who takes the time to do that. Most wouldn't even know the

person they're talking to." Be a Political Operative

prime minister of the country of the Politics within your organization count too. And today, being politically savvy is even more crucial as companies' tolerance for IT failures diminishes.

"Project managers are easy scapegoats for problems within the organization." Hagenin says. "You need to understand people and their motivations, figure out who to ally with and who to watch out for." Even keeping the project sponsor actively involved once the project is kicked off can be a game of relationship management "It's a key relationship to develop, but it's easier said than done" he points out

Political sayvy requires good relationship skills, but it also means taking an honest look at how your company operates and using the system to your advantage says Johanna Rothman a project manager who is president of Rothman Consulting Group Inc. in

Arlington, Mass. For instance, if your business needs require you to complete a project in five months, but you know from experience that it can take two months just to get the OK to begin, you need to find ways to work around the edges to get a head start. You might begin by prototyping. for example. "It's a politically correct way of setting management in year without saying, 'We take too long to

Assert Yourself

start projects," Rothman says.

With heightened pressure to succeed, you need to be more outspoken about what you need to get the job done. For example, if you work on global projects. you can't expect your travel budget to magically increase so you can meet your project counterparts face to face. But you have to make it hannen. Even if your company has placed a moratorium on travel, you can't take no for an answer Hagerin save

The same goes for dealing with business constituents. Five years ago business owners were more apt to hand over the reins when it came to choosing technology for a system. But today, "you're dealing with business people with very strong opinions on how things should be run, so you need to actively own the project," Robbins says.

Re Florible At the same time, you have to remain flexible, Robbins says. Intense competition is pushing companies to try business and technology gambits they've never attempted before, making projects increasingly complex, pebulous

and speed-driven. That pressure results in a double threat, says Rothman. Not only do you net tight deadlines, but the projects that come your way may arrive without clear requirements. The more speed you need, the less you know about what you have to do," she says.

At some of Rothman's client sites, the people who fund the projects provide tight or impossible deadlines," she says "And they provide ambiguous requirements, when they provide require-

ments." This means project managers have to be more adaptable than ever before For example, they may not be able to employ traditional methodologies, like a phase-gate life cycle, because those don't provide a completed product as early, Rothman says,

Also, there's no guarantee you won't have to charge gears midway through "If you're a traditional project manager who thinks you can line everything up and execute on it, that doesn't work anymore." Rothman says "There are fewer and fewer project managers who say. 'Let's lock down the project requirements early,' because they know

they can't." So, if you're in that situation, instead of trying to define all the requirements



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VIRGINIA ROBBINS, CHIEF OPERATING OFFICER, NORTH BAY BANCORP

unfront - which could take you six months of more - Rothman suggests prototyping a few features in a month's time to try out the architecture you think would work and get feedback

"I can't remember the last time I worked on a project where we had com plete and unambiguous requirements to start," she says. "Yet so many project managers keep the requirements phase soing forever, instead of showing people something about what the current requirements represent "

Most important, you need an arsenal of techniques that you can apply to all stages of development - from iterative

planning and developing and applying good metrics to fast prototyping and code reviews, she says.

ture and uniformity, but you can't do it rigidly," she says. Sharmon Your Social Skills

Project management's mosts in the comstruction industry may account for its traditionally heavy emphasis on measurement and scheduling, but the focus among the new generation of project managers who have been certified by Project Management Institute Inc. is on soft skills, says Emcor's Baker.

That means that understanding emplower motivation, organizational dynamics and team behavior natterns has become as important to project managers as mastering critical path analysis. PFRT charts and work-breakdown Structures, says Baker "We're slowly morphing to the point that enforced illeare as important as the hard skills " he

So. how do you develop all these new skills? Project management training is certainly useful, but ultimately, experi-Robbins serves. "You can bring strucence is the best teacher. "I don't think there's a certification program that can substitute for lessons learned in life." Haperup says, "There's a need for birth, ly seasoned project managers on these strategic projects in organizations."

Start now to make every project count as a step toward achieving that seasoned expertise. Brandel is a Computerworld contribut-

ine writer in Newton, Moss, Contact her nt marchrondel@uerizon net



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The Real Value in Sarbanes-Oxlev

Companies are finding unexpected business and IT benefits in compliance



Fear can be a powerful percentor of unstanding conduct, say Stephen

Wagner and Lee Dittmar But havings rans on discovering and creature value. In this month's Harvard Buriness Purious the continue former have smart companies are finding overnooned value in Sarbanes-Oxley Act compliance. Wagner, who is the monaging partner of

the U.S. Contor for Cornerate Generalines at Deloitte & Touche LLP, and Dittmor. who leads the enterprise governance consulting practice of Deloitte Consulting LLP, talked with Computerworld's Kothleen Melymuka about how companies can use compliance to their advantage. (For an expanded version of this interview, say security and change management Computerworld.com.J

ut were some of the big control gaps that early Sorbanes-Outer efforts uncovered?

WAGNER: We found in many instances that control documentation was way behind or didn't exist. A second issue was the tone at the tore the communication out of the boardroom and the CEO suite that sets the stage for the organization including how it deals with ethical standards. We found that there was often very little communication across organizations around the importance

of maintaining good controls. In some

What's a Control? Example Example ADAPTED FROM HARMED BUSINESS REVIEW

cases, we found duplication of control activities that created inefficiency. We see into una sary complexity in the extreme. In the II' area. there was duplication of systems One division

financial accounting systems DITTIMAR: And organizations didn't know when these control programs consisted of. They knew they had them, but as one executive told me, it was "kind of tribal." There was no consistency in how they did it. We also found uncontrolled accres to systems and challeners around

few have Sarbanes-Oxley compl forts yielded dividends at some compani WAGNER: We look at the documentation

of systems and policies. In its absence, it's hard to know what's mine on and hand for employees to know what their responsibilities are. At many companies, the documentation — job descriptions responsibilities - wasn't up to date, so it was bard to hold people accountable for specific standards of performance. By getting that up to date, companies were able to execute business activities better. because while documentation serves a purpose in control, its primary purpose is as a written mide for people to follow Without it, people are ad-libbing,

DITTMAR: Documentation requires a firm to take a hard look at its end-to-end data. processes and systems. People pet in siles and they don't know what happens in the next step. Sarbanes-Oxley forced companies to look at business processes. and say, "I wonder why I do that,"

You mention a new mind-set among be of directors, particularly audit commit

WAGNER: Previously, they were paying attention, but they were not nearly as engaged as they are today. They ask different questions and bring a higher level of expertise than they used to. They ask how things will be resolved. They want to understand all manner of material risk and what remedial actions are going to be undertaken. There's a keeper interest in IT activity, which they shied away from in the rout

You write that companies are b loverage Sarbanes-Oxiey activi tate other compliance tasks. DITMAR: Compliance initiatives are siles unto themselves, but people and

now realizing that there's some commonality of good compliance programs nazardless of domain. CIOs would low to have a comprehensive view of how IT can better support governance, risk management and compliance. There was no one place to go but to the Open Compliance and Ethics Grown IOCFGorg is creating a source for people to net basic information on leading practices to deal

with this. Companies are just scratching the surface now about how to bring a more comprehensive approach so compliance becomes a byproduct of what they do.

low did compliance efforts help Manpe tandardize its software development? WAGNER: A company like Manpower. with an enormous poverall, is vulnerable

Even the smallest of errors can have a dramatic impact on the financial statement. But every riece of software at Manpower was being dealt with in a unique fashion. By deploying a consistent way of addressing change management activity, they gained assurance they won't have problems because something went wrong without a standardized process. DITTMAR: Manpower is the example, but you can plug in any large company name. Some of the best-known companies built on technology have this challenge

w can Sertunes-Oxley occupitance help re duce post-merger and -aquisition com WAGNER: Over 10 years Iron Mountain

had acquired more than 150 companies. It had to digest 150-plus separate systems. By doing that, you inherit a variety of different platforms that aren't necessarily complementary, so there's a high risk of problems and high costs of operating separate systems. Sarbones-Oxley

has served as a catalyst to enable mony companies to address this problem

How has Sarbanes-Oxiey helped certy better understand the risks and on

that arise from partnerships? WAGNER: Companies may rely on an custommed service provider to manage rayroll, warehousing or other critical activities, and those third parties are also providing financial information. to those third parties; they have a respunsibility not only to evaluate the contents and a shale over moffice about to assess the controls of that third party Sarbones-Oxley shiped a bright light on these relationships and found [that] many companies misunderstood the extent to which they are responsible for

these extended controls DITTMAR: In IT outsourcing, the need for controls is a same chancer. It has no be explicitly addressed in service-level agreements. It's leading to pressure. because if you ask an outsourcer to do more, they want to change you for it. The book is far from closed on this

How has Sarbanes-Oxley compliance led to processes to minimize human error?

WAGNER: In most companies, the preponderance of controls is performed manually. If you are able to take the human factor out, the risk of problems with controls greatly decreases. Automated controls are not subject to fatirue. absentorism or distraction. But onportunities exist in many ERP systems for many automated controls that were percer activated. Many operations are having a second look at that and looking at the whole internal control program to see where they can automate.

A lot of these Sarbanes-Oxley benefits an the kinds of thines that CIOs have been advocating for years, with mixed results DITTMAR: 1 agree. ClOs say, "Things

would be better if we standardized on a particular application," and the business units say, "Sure, as long as everybody moves to mine." So this is an oppor tunity for CIOs to step up and to get CXO stakeholders to understand all the elements - people, process and technology. The president of a very large technology company recently told me that compliance will be the single largest driver of IT priorities over the next decade. CIOs have a very important role to play. Companies can't do this efficiently and effectively without properly leveraging technology. It's not emough to just write good policies and processes. you have to have technology to support

it or it won't be sustainable.



The Real Value in Sarbanes-Oxlev

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counting walne in this month's Harrand Business Review, the authors discuss how there was duplication of smort companies are finding unexpected systems One division value in Sarbanes-Oxley Act compliance. of a commany had 200 Warner, who is the managing partner of financial accounting systems the U.S. Center for Corporate Countries at Deloitte & Touche LLP, and Dittmar, what their control programs consisted who leads the enterprise governance consulting practice at Delaitte Consultine executive told me, it was "kind of tribal." LLP talked with Commuterworld's Kath There was no consistency in how they Ieen Melymuka about how companies can did it. We also found uncontrolled acuse compliance to their advantage. (For

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_INFRASTRUCTURE_LOG

_DAY 16: It's out of control. It takes people farever to occess...everything. We con't get anything done. We're so inefficient. There's got to be a better way.

_DAY 17: Gil says he's found one: derodynamic bodysuits. He says everyone will be able to work faster and better now.

DAY 21: I've token back control with IBM NebSphere Portol—o simple and first start to a service-oriented architecture. It works with what he have and integrates the apps, processes and info our people need to do their jobs effectively. Morks with our customers and suppliers, too. Now we have a customizable interface that puts everything at our fingertips.

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COMMUNITY COLLEGES

After years of mixed reviews, some twoyear IT programs are getting a reality check through strong ties to area businesses.

BY DAVID RATHS

LAN CARTER faced a daunting challenge when he took over the network technology program at Green River Community College early last year. The Auburn, Wash-based school had not updated to Windows Server 2003, and its curriculum was outdated. Enrollment in the program had shrunk to only four students "It was in disarray, and there was a huge disconnect" between the school's program and local employers, says Carter, an IT instructor. "And I

think the problem was more on our side than on the employers' side." As he revamped the program, Carter sought help from local IT hiring executives and found them very receptive. "Some are incredibly busy, but they said, Yeah, I'll help. I need to hire those people," he says. The relationship between IT employers and community colleges is sometimes a rocky one. Sourceed between private technical schools and four-year universities, many two-year programs have seen enrollment drop sharply since 2000. Serious communication gaps hamper cooperation between industry and many community college IT

programs, according to an ongoing two-year study by the National Workforce Center for Emergine Technologies (NWCET). The study, called "Strengthening Connections," seeks to hridge those gaps by detailing employer perceptions of community college IT graduates and identifying exemplary education

employer partnerships. In general, employers perceive community college graduates as technically skilled but not well-rounded enough, says Sandra Mikolaski, the NWCET's associate director. "They don't have the life experiences or the problem-solving skills employers are looking for." she says. Employers are also frustrated with community college IT training programs because they

seem so bureaucratic. "[Employers] don't understand why change takes so much longer than in business. and they start to think the colleges aren't listening

Mikolaski sava But some community colleges are listening. and in response to advisers' input, they are overhead ing their career-related curricula, developing new courses more quickly and enhancing internship on-

portunities for students. **Green River Starts Over**

After Carter began redesigning Green River's IT program from scratch, he held a daylone session with IT professionals in Auburn. They informed

Carter that there was a shortage of skills in security and networking infrastructure. They also told him to put less emphasis on programming and that they needed IT generalists, not just technicians trained Continued on page 54







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Continued from page 52

only in Microsoft Corp. technology.

After lating critical areas of knowledge for job categories that were in demand, each as network administration and security analysis, the team mapped foren River courses that could help peoper students for the job-category tasks. They developed a grid oright competencies business, communication, analysis, fromwork, operating system management, spectry as discretization polylectation management, security as discretization between the forming should large pake in the extension for the learning should large pake in the extension to the learning should large pake in the extension or through large raising the security of the learning should large pake in the extension or through learning the security and the security of the learning should large pake in the extension or through learning the security of the

"It was also hammered home to me that we need to focus on soft skills," Carter says, so besides courses in networking, programming, databases and operating systems, students are now required to take classes in public speaking, customer service, project

management and user support.

It told Alan we are afford to hire people who have only technical skills, says Don Alishio, a network engineering manager at The Boeing Co. who was part of the group. "They have to have business and planning skills and financial awareness," he says, adding that student interns who appear hunger to learn

stand out to employers. The season belief the college redesign its networking associate's degree and create specialized certificate programs. Altibio says he was impressed with the turnaround time on the new curriculum. We held those meetings in March, and they were offering the new courses by September, "he says. "That's fast, And the process of channe in curriculum

previously had been very slow." Breaking Up at Bunker Hill

Two years ago, administrators at Bunker Hill Community College in Boston made a radical change. To focus on emerging technologies, they spil roff the school's business- and industry-focused IT program from the tradicional computer IT program. "I think we've the first community college in the country to divide its IT program in two," says. Andrea Lyons, chal'sweeman of the IT for Business and Industry program. "We realted we had to respond more quickly to the necks of business. We had to be able to add and drop closures.

To get that rapid turnaround, Lyons suys, each area of study needed its own industry advisory beach, instead of having just one board for the whole IT department, as is customary. Your networking prosumers was not going to get reactions on what is cutting origing to get reactions on what is cutting origing to go the control of the con

sne says.

The new advisory boards can give focused advice.

For example, when Lyons recently questioned whether to drop a NetWare course in flow of one on Linux, she had access to the views of six executives in local networking companies. Lyons, who has been teaching at Bunker Hill for nine years, says she depends on these newly formed boards to keep her up to day.

"Security and IP communications have really come to the forefront in networking recently," says Dave Hart, executive vice president and chief technology officer at Networked Information Systems LLC to Woburn, Mass, and one of Lyons' industry advisers.

UP TO DATE

In 2005, the National Workforce Confer for Emorging Technologies held four regional focus groups to gether input hom IT programs at two

year asstitutions and their industry partners When saked how community college faculty could stay current on trends in the held, form partnepants had the following suggestions: Provide college faculty members with ub-

shadowing and mentoring relationships with industry professionals. Fund annual professional development

activities for faculty members.

Deal with the fact that some tenured faculty members refuse to stay current

Offer laculty members the opportunity to carn vanidat certifications.

Offer laculty members return-to-industry apportunities with employers.

www.mwcet.arg/projects/strengthen.asp

"How are you going to be aware of that if you've been out of the workforce nine years and spend all day teaching? That's why! I think it's a brilliant move on her part to reach out to the local business community. After all, we've her customers. I'm relying on those students to help make my company better." Another of Loyens' advisers it former student Dawn

Maxy, who graduated from the networking program in 2000 and in own network technical ast Boston law firm Brown Rudnick Bertack Itarels ILP Maxy says that as a student, she found the curriculum at Bunker Hill relevant enough, but an internship she did was even more important. (Vertiff the handson experience is crucial.) she says, adding that the internship and her job in Bunker Hill? computer this scened to weigh more heavily with employers than her technical sket.

Lyons' focus now is on getting Hart, Maxey and other advisers to help bolster the ioternship program, which she says should provide the combination of course work and training employers tell her they're looking for

A robust internship program is one of the most valuable aspects of a community college coleration, but building such a program is one of the toughest assignments affecting people in I poors position, says the NWCET's Milodakit. "Setting them up is a massive task," she says," so it requires the involvement of CEOs, college presidents and deans to commit the resources to sentian them."

Keeping community college courses relevant is "always going to be a challenge because the technology changes so rapidly that it's tough to anticipate employers' needs," says Arlene Peterson, a senior data network analyst at Northwest Airlines Corp. in Eagan, Mino.

Northwest doesn't have much turnover in IT and doesn't hire many community college graduates, yet it considers liver Rills Community College a key training partner for its internal IT staff. The airline is one of eight companies that have joined with the Inver Torove Heights, Minn-based college to identify common needs in IT training and seek state grant funding so that Inver Hills can purchase equipment and develop curricula.

The terms of the state funding require that employers monitor the progress of training and also contribute cash or in shird donations to help pay for it. In recent months, Northwest employees have attended Inver Hills consens on subjects such as security, etchphony and wireless technologies. Every four months during the grant cycle, the state requires employers to fill out forms on the shortcomings and strengths of the training.

nee training.

Peterson, who leads a workgroup of nine employces supporting IP routers and switches at Northwest,
says the college has been very responsive to suggestions. "Also, the employees have found it beneficial,"
she says. "They are developing a whole new skill set,
and they are skills Northwest is roules in no skill.

Establishing a Feedback Loop

The grant-writing process has created a feedback toop in which employers can be in regular contact, not only about how the training is going, but also about uponning basiness needs, says lim Mc-Cormick, manager of IT training programs at lover Hills. Based on strong employer interest, his next grant proposal involves developing a comprehensive IP telephone conversam.

McCormick also solicits input on upcoming courses' content. "We were considering offering two Cisco IP telephony classes, but one employer asked about including Awaya or Nortel equipment, so we have to think about adding those," he says. "They also suggested IP video trainine."

McCormick says that while it's crucial to apprade the skills of people in the workforce, it's also important for students who don't have jobs yet to hear directly from employers. "We do regular hiring fairs," he says, "and representatives from six IT organizations make presentations to students about which kinds of skills they are currently looking for."

Another receivact mechanism comes from the students themselves. Brian Cullen, another sension network analyst at Northwest, has taken classes at Invetibility in Cisco and radio frequency technologies. "Tim always looking for ways to upgrade my skill levels." he says. "This gave me a chance to see some protocols I didn't work with on a day-to-day basis to see if

cols I didn't work with on a day-to-day basis to see if they might he useful someday." Cullen was pleased with the quality of the curriculum and instruction but notes that it's crucial that

riculum and instruction but notes that it's crucial the colleges stay current on the technologies employers are using. "I think lawer Hills gets that feedback," be says. "both from the employees of the companies in the grant program and from companies coming to campus to instruciew prospective students." b

Raths is a freelance business writer in Portland, Maine.

Congratulations Award Recipients!

Computerworld's Storage Networking World, in conjunction with SNIA, proudly announced the results of the "Best Practices in Storage Networking" awards Program. This program honors IT users "Best Practice" case studies selected from a field of qualified finalist.

Honoree Award Recipients in each of the following categories were recognized during the Gala Awards ceremony at Storage Networking World in San Diego, CA, April 5th:

the Gala Awards ceremony at Storage Networking World in San Diego, C. Data Lifecycle Management

- The George Washington University Washington, DC
- Toyota Motorsport GmbH, Cologne, Germany Finalists: Austin Radiological Association - Austin, Texas

NBA Entertainment - Secaucus, New Jersey
The Computational and Systems Biology Initiative (CSBI) at (MIT) - Cambridge Massachuse

Industry Regulation Compliance and Corporate Governance

- Commerce Bancorp, Inc., Cherry Hill, New Jersey
 Kindred Healthcare Louisville, Kentucky
- Kindred Healthcare Louisville, Kentucky
 Finalists: Chittenden Corporation Burlington, Ven
- IPR International, LLC Conshohocken, Pennsylvania Webcor Builders - San Mateo, California

Innovation and Promise

- · Arizona Public Service Company (APS) Phoenix, Arizona
- ShopKo, Green Bay, Wisconsin Finalists: Et Networks - Los Angeles, Californ
 - Foster and Partners London, England State Street Global Advisors (SSgA) - Boston, Massachu

Storage Reliability and Data Recovery

- Defense Acquisition University, Fort Belvoir, Virginia
- University of Minnesota Minnesotis, Minnesota Finalists: Burlington Coat Fectory Warehouse Corporation - Burlington, New Je
- Fulcrum Pharma LLC Hernel Hempsteed, Hertfordshire LifeLink Foundation - Tempe, Floride

Systems Implementation

- · Children's Hospital of Philadelphia Philadelphia, Pennsylvania
- Statistics Canada, Ottawa, Ontario
 Finalists: Infinity Pharmaceuticals, Inc Cambridge, Massachusetts
- Intellidyn Corp. Hingham, Massachusetts Lockheed Martin - Denver, Colorado

Mark your calendar to submit nominations for the Fall 2006 Awards Program to be appounced May 2016







Desktop Linux

April 24-25, San Dinor nsor: Desktop Linux Summit Topics at the Fourth Annual Design I was Summe unclude how to end the Linux software drought, personal distrator recovery systems, open source software economics. Linux for the business user and how composte

America will adopt I your

nril 24-26, San Francisco mer: Lighthouse Seminars LLC Gilbane Sen Francisco includes two conferences: Technologies for Content Applications features tracks on content management, content technology, enterprise search, automated publishing for marketing, blogs and wikis, and case studies. The Enter prise Digital Rights Management ses

and architectures.

sions include topics on applications **Cutter Summit** May 7-10, Cambridge, Mass ner: Cutter Consortium

Topics at What's Nest in IT include the broadband explosion, powerhouse of word TI to soo sell or some IT-related litigation, adaptation and diffusion of the open-source model linking technology to markets, sourcing and vendor relationships, and emerging technologies, it will also include preconference workshops on service-prented architecture (SOA) success, agée management, responrelation and CVO professioners a cutter com

Integration

May 22-24 Boston e: Interpation Consorter The 2006 Global Integration Survent targets the end-user, software, hardwere academic and reposal hystoess communities, Topics include using SQA to maximum the value of legacy spolications, SOA quality assurance. business intelligence and enterprise integration. It also includes the

Integration Solution Showcase, a real-time, Iron Chef-like competition to build the best integrated system

in one day

BART PERKINS

The Pervasive Potholes Of Charge-out

N AN EFFORT to allocate limited IT resources effectively across the organization, many corporations are considering establishing charge-out systems. They believe charge-out - also known as chargeback - will make consumers of IT services better stewards of company resources and allow the organization to better align IT usage with corporate priorities. (To learn about the advantages and disadvantages of these systems, see "Charge-out: How to Do It

Right," Feb. 13.) Will your charge-out system he viewed as fair rational and understandable. or will it he received with

seneral fear and loathing? The perceived fairness of IT pricing depends on choosing a pricing structure that accurately reflects actual consumption

Don't use simplistic measures such as departmental head count. That often results in unfair charges. For example, problems can occur if one department invests in a new system that reduces its head count (thereby lowering its IT charges) but actually

increases its IT consumption.

across all departments.

Don't roll charges up into an "easy to understand" number That's often both confusing and unfair Most important, avoid pricing anomalies. Effective charge-out systems must produce the same charge for the same service

Before implementing charge-out, you need to address these potential potholes: Purchases. Are users free to buy IT products and services outside approved channels? Other departments may argue that if they have to pay for a service, they should he able to buy it at the lowest price. IT argues that introducing unsurported suppliers ioto the organization makes it more difficult (and costly) to manage the overall infrastructure Unfortunately, these arguments often involve unfair apples-to-oranges compari-

sons. For example, after one company



established laptop standards. users complained that Comp-USA sold the same product for less. However, the CompUSA product had a shorter warranty, a different operating system (XP Home Edition) and weaker virus protestion

Provider. Can IT sell serrices outside? If users are free to buy outside services. IT may propose selling its services to other companies. In practice, selline IT services externally is often a mistake, since it can easily distract IT managers from

their own company's needs In addition, to provide external services. IT needs more internal discipline than IT shops at most large companies have. Pricing. Most charge-out systems charge for actual costs incurred, but you can design pricing mechanisms to

influence behavior. For example, more sophisticated charge-out systems offer significant discounts for off-neak use New IT services can be priced as loss leaders to encourage experimentation, while nonstandard services (tape mounts or unsupported handhelds, for example) can be charged above actual cost.

Torms. Are your terms helpful or confusing? Express charges to user terms. such as monthly desktop cost, cost per invoice or monthly cost per gigabyte stored, rather thao in technical terms. In addition, pick units that help depa ments understand their usage and indicate how they can control their IT costs (by reducing overly complex queries, climinating unused mailboxes or purging files, for example).

Partial charge-out. Are costs fully or partially recovered? John Chambers. Cisco's CEO, views infrastructure as part of the cost of doing business. Cisco's IT department charges other departments only for services beyond their basic "foundation infrastructure." Unfortunately, this approach often deteriorates into political debates over exactly what is inchided in the foundation infrastructure

Periodic technology retresh. How is technology refresh funded? Hotels, restaurants and retailers know they must regularly paint, replace carpeting and update their properties; they budget and plan accordingly. Most corporations understand this concept intellectually but quarterly earnings pressure often makes them rejuctant to actually fund necessary IT technology refreshes

Project management costs. Who pays when user departments hire outsourcers? Often, outsourcers must interact with existing IT systems, but no budget is provided for project management. As a result, the outside project is often inadequately managed, or project management costs are buried to other budgets (thereby defeation the purpose of charge-out). Politics. Does the charge-out system recover (collect) enough money by the end

of the year? Some companies insist that IT recover enough money to offset all costs. CIOs who are penalized for under-recovering get very good at setting rates so that IT can collect more than is needed and then give end-of-year rebutes. Their user departments get used to receiving this "free" (unbudgeted) money. Anticipating gratitude, new or politically unaware ClOs often lower the IT rates but instead suffer political fallout for eliminating expected annual refunds

Use charge-out to leverage your alltoo-scarce IT resources to produce the highest return for your organization. Just beware of the potholes, and design effective solutions to get around them.

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Florida Wants Answers From E-voting Vendors

Issues subpoenas to find out why three aren't doing business with Leon County

BY MARC 1 SON TALORIDA ATTORNEY General Charlie Crist last week irroad subportas to three electronic voting muching manufacturers in an effort to find out why each of them has refused to do business with the state's Leon County. The subpoents are part of

an investigation started by Crist's office in February after the vendors' alleged south of the county indirectly caused it to be in violation of Florida and federal election laws The subponenas issued to Flortion Systems & Software Inc. (ES&S), Diebold Election Systems Inc. and Seguoia Vota ing Systems Inc. are seeking

to their sales of e-votine machines In Florida since 2003 Crist said the probe was launched to determine whether the companies, which have done business throughout Florida over the past three years, privately agreed to withhold their near from Leve County and its elections and pervisor, Ion Sancho.

copies of documents related

"These subposency are to ensure that the rights of our voters with disabilities as well as all Florida voters, are secured." Crist said in a statement The relationship between

Sancho and voting machine vendor Diebold has been rocky in recent months or the above tions supervisor has become

screen voting systems In December, the Leon County Commission - at

Sancho's urging - voted to replace its Diebold Accollege optical-scan gear, Sancho eited concerns about the security of the systems and their inability to adhere to federal Fieln America Vote Act requirements and state election laws.

Days after the vote to replace the Diebold muchines Sancho reached an informal agreement to buy \$1.8 million worth of voting conjument from FSAS That deal fell through a month later lesso ing the county facine an order from the Florida secretary of state's office to repay a \$500,000 grapt that had been

earmarked for the machines. Sancho suggested that the vendors refused to sell their

the state of the s A page from the subspens issued by Florida's attacker reserve

machines to Leon County *because they could. The laws of Florida offer no protection to elections officials? The windows had varying responses to the attorney

general's action Dirhold declined to comment on the subpoenas, but a spokesman contended that the company did not refuse to sell equipment to Leon County: rather, the relationship was terminated by Sancho.

ES&S also said it is reviewing the questions and document requests. A spokesman said only that "after evaluating all of the information available to us, we reluctantly determined that we could not expect to have an effective part nership with [Leon County]." Sequoia said that the complaint is without merit and promised to fully cooperate with any government investi-

Continued from page I Voters

- or 43% - were "kicked out." or rejected, in Los Angeles County between Jan. 1 and March 15. Such results have election officials statewide fearing that the new registration system will bump eligible voters from the voter rolls. The problems could first affect a small number of local

elections starting this month. including a special congressional election tomorrow in San Diego County. The registration database,

run by Secretary of State Bruce McPherson, was mandated by the federal Help America Vote Act (HAVA) The law requires that each state establish a centralized voter registration database In an e-mail response to

amestions a spokeswaman for McPherson wouldn't provide technical details of the system, nor would she talk about the nature of the problems. She did note that 74th of voter the first try. The rest, she said, require manual validation by county elections workers.

Strict Criteria

Elaine Ginnold, registrar of voters for Alameda County. said the rejection rate there hovers around 10%, a total that would be expected with any new system. However, she also noted that the new system could kick out eligible witers

County election officials said the new registration system requires that notential voters provide a driver's license number or other identifying information to a county

registrar. The data is keyed into a local database and periodically uploaded to the new centralized system, which matches it with information from the California Department of Motor Vehicles and other agencies to verify that it's authentic.

The rigorous system will reject applications whose data doesn't exactly match the confirming documents. Even small discrepancies, such as a missing middle initial, could cause an application to be reinched.

*My main concern is there rould be 20,000 to 30,000 new registration cards delivered to Alameda County at the peristration deadline," Ginnold said. The deadline for the state elec-

tion is May 22 The registration information takes a week to process into the Alameda database before

being sent to the state database for matching, which can take up to five days. Ginnold said. crafted We would get the kick-outs only a few days before the election - which won't allow

enough time to manually validate them," she said The potential problems have provided fodder for McPherson's critics, who claim that he selected rigid guidelines that could unfairly penalize voters. The voter database has

been a disaster for anyone who is trying to register for the first time or reregister because they moved, got married and need to change their name or change parties," said California State Sen. Debra Bowen who held a bearing last week on the matter. A spokesman for Bowen said the rejection rate should be between 1% and 2% The U.S. Department of

Justice, which enforces HAVA,

worked with McPherson's office as the system was being

eation P

The secretary of state's office has set up processes to offer guidance to counties and voters on fulfilling the new requirements, McPherson's spokeswoman said. He has also proposed legislation to provide common-sense flexibility so that no eligible voter should be denied the opportu

nity to vote because of a technicality" she said Ginnold said that ultimately a centralized database that has a single entry for each water can successfully prevent fraud. Previously, election officials relied on local databases and registration rules, and exact

matches weren't required. "The enal is excellent and we shouldn't lose sight of that," Ginnold said. "The road is a little rocky now."

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Summit Agenda

10:30am - 11:00am

11:00sm - Noon

7:45am - 8:15am Registration and Networking Breakfast 8:15am - 8:30am Introduction and Overview

Julia King, National Correspondent and Executive Editor, Events Computerworld 8:30am - 9:15am Merket Outlook and Trends

Jon Togo, Managing Partner, Togo Partners International 9:15am - 9:45am IT End-User Case Study: Austin Radiological Association Todd Thomas, Chef Information Officer Austin Radiotomy Accounts on

9:45am - 10:00am Refreshment and Networking Break 10:00am - 10:30am Technology Presentation Claude Lorenson, Group Product Manager, Storage, Microsoft Corporation

> IT End-User Case Study: Franklin W. Olin College of Joanne Kossuth, Chief Information Officer, Frankin W. Olin College of Engineering

IT End-User Panel Discussion Moderator: Julia King, National Correspondent and Everytive Editor Panelists: Paul Stubrtsch, Corporate (T Director, Wilbert, Inc.) Todd Thomas, Chef Information Officer, Austin Radiology Associate Joanne Kossuth, Chef Information Officer, Frankin W. Olin College of Engineering

Optional Afternoon Sessions

Noon - 1:00mm 1:00om - 2:30om Speed Dating with Solution Partners

Cotostad Speakers include:















FRANK HAYES • FRANKLY SPEAKING

Gotta Have It

S BOOT CAMP really Apple's big play for the enterprise desktop? Naaah. The enterprise desktop is a commodity world. The commodity PC market is a cutthroat business with razor-thin margins in which vendors have no way to differentiate themselves except with low prices. Apple doesn't do commodities. Apple sells comfort and convenience to midmarket users and luxury to the high end. But the commodity desktop? Fuggedaboudit.

There - that was easy, wasn't it? And now that the bogus question of the week is out of the way, let's look at the biggest reason Boot Camp does matter to corporate IT shops.

Here's a hint: You'll find him sitting in a corner office.

You know who I mean. Maybe he's work CEO. Maybe he's some other can't-say-no-to-him executive. The one who's got to have the pricey lanton that never leaves the office. And the big expensive LCD monitor that never displays more than one window at a time. And the best - or at

least spendiest - of everything else In the past, when Mr. Gotta Have It wanted one of those stylish Macinthings, you could beg off with the fact that it didn't work with your corporate e-mail system, corporate intranet and key corporate applications. Now that excuse is cone With all the press coverage of Boot Camp, every Gotta Have It knows this isn't merely a backer

gimmick or a sorta kinda maybe imitation. It's real Windows XP. It can run all your standard corporate stuff. Mure important, it's too expensive fur the

rabble to have in their cubicles. Ergo, it's a status symbol. Gotta have it. And you've got to support it. Maybe just the one, maybe a few more if it catches on as a much-desired executive perk. Don't worry, the Macs won't spread too widely. The Gotta Have It crowd won't want everybody to have

one, or it'll lose its value as a status symbol. No. don't fight this, Let your big wheels have their toys. The Gotta Have Its can now for them out of their own budgets. And they'll also subsidize the expertise you'll need for the Mac users doing real work

Hey, I said they were the biggest reason - not the most important. See, while those big wheels see this as executive bling, some of your little-cog users are buying Macs as home computers. It's the iPod effect: They buy illods, they luve 'em, they

form brand affinity for Apole, they decide to give Macs a try

That is, after all, why Apple is adding the ability to run Windows to Mac OS: to make the transition a little easier for users who'd like to switch to Macs but are worried about lowne their old PC files and applications. Boot Camp takes away some of the risk, letting users cross the chasm at their own pace and jump back whenever they feel the need to

That's no way for Apple to take over the enterprise. Heck, it's unnecessary: When the whole organization changes operating systems, the IT shop manages the transition. In fact, that kind of flexibility is a had idea in a large-scale transition where nobody wants individual users to besitate

or double back But when individual users need help logging in from home with their new Macs, that flexibility will come in very handy. Instead of the completely alien Macs that you just couldn't deal with in the past, your help desk will be able to treat them pretty much like any other Intel-based desktop PC running the latest version of Windows

And better still, whatever tricky little bitches may show up, your help desk will have a big head start on solving them - thanks to every Gotta Have It who's already demanded support for Boot Came Everybody wins: Your corneroffice Gotta Have Its are happy because they get their fancy status symbols. Your regular users are happy because they get more

choices and better support from IT. And IT? We're happy that, even with Bout Camp, Apple isn't about to make a big play for the enterprise. Just a few little corners of it.

Staving Awake Is Job One

New company policy expressly forbids all non business-related Web use, and it's enforced with new hrewall and filter settings. Just after it kicks in. second-shift plant supervisor tracks down IT plant fish to ask why he can't access his ISP's Web site Fish: Why do you need to access that site? Supervisor: "I need it for my job." Fish: Right. Did you read the revised policy that says you can't surf the Web for anything other than business-related stuff? Supervisor: "Yeah, but it's nice to keep up with current nts, since I'm stuck here all night

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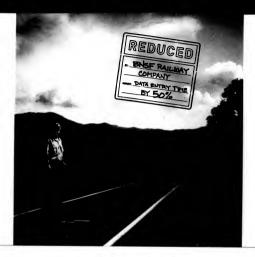
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